Manual

FOR

Georgia Teachers

Published by

State Department of Education

M. M. PARKS, Superintendent

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1922

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MANUAL

FOR

Georgia Teachers

THIS MANUAL SHOULD BE PRESERVED.
When not on the teacher's desk and in actual use it should be in the office of the Board of Education of .....County.

LB1561
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1922

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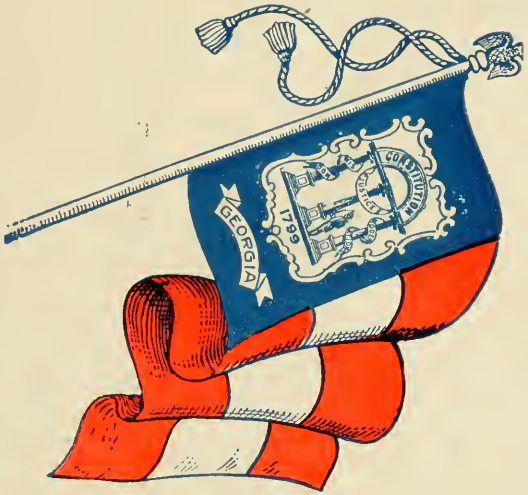
GEORGIA
1795

PREFACE

The first Georgia Manual was published in 1902; the second, in 1911; the third, in 1916; the fourth, in 1921. Each edition was reprinted as needed to supply the demand from year to year.

This number is a re-print of the excellent edition of 1921, which was edited by the former State Superintendent of Schools, Dr. M. L. Brittain.

At the end of this volume, I have added an article on "Suggestions for the Teachers' Library."

Many teachers have come from college without a sufficient knowledge of the professional literature available for teachers. Many other teachers have never been to college or normal school. To all such teachers it is hoped that these suggestions will prove helpful.

Superintendents should lend every encouragement to teachers for improvement through training for service by reading the following:

1. The Georgia Manual,
2. One or more teachers magazines,
3. The books in the Reading Course for Georgia Teachers,
4. Some of the books found in the list of suggestions for the Teachers' Library.

There is today a tragic waste in education. Often, there is too much time spent in tedious teaching and talking—precious time that ought to be used by the student in reading and learning how to use books. It is a reflection on our educational system when we find so many graduates of high schools and colleges lacking in the love of reading or the habit of reading, and often lacking in the ability to find the proper book to help them continue their educational and professional development after leaving school. That person (it matters not how many honors or degrees the person has) is not well educated who has not formed a habit of continued and skilful use of books after leaving school.

TRAINING TEACHERS IN SERVICE.

Fortunate is the teacher who has had the opportunity of going to college or normal school or summer school; but in the absence of such a privilege, it is a mistake to neglect the glorious opportunity of growing in service.

Abraham Lincoln never attended college or high school; and yet he could write and speak and influence his generation better than any college graduate of his time. Joel Chandler Harris, Georgia's most famous writer, received his education from the library on the Turner plantation in Putnam County. Henry Ford and Thomas A. Edison never attended a high school, but they learned in the school of experience; they learned from people and from books and from experimentation; they learned by doing.

Rockefeller never studied in a school of commerce, and yet he learned business in the business world. Shakespeare knew little Latin, and less Greek, and yet somewhere he learned to write better than any scholar of his country.

So, the teacher, although unable to go to college, yet can learn to teach in service by study and supervision. It is a great mistake for a teacher in service to grow discouraged or stop growing merely because there is not the time or money, or opportunity to go to college.

STUDY AT HOME.

To encourage such teachers to work and grow at home is the object of this article. The colleges are publishing good books. Get them. Use them. Bring the benefits of college to your own door. So I claim much good training of teachers can be done in service with a little skillful suggestion and supervision and encouragement. And much must be done in service because the colleges cannot properly train one-third of the 16,000 teachers needed in the Georgia schools. Many teachers haven't the money for the long college course which is often expensive, and too little related to the practical work of the schools; besides the State hasn't enough funds to give an expensive college course to every teacher. Hence, on account of lack of funds and on account of lack of proper adjustment, we cannot depend upon the colleges for training even one-third of our teachers, we must earnestly and sympathetically help thousands of our teachers to help themselves. i. e., help them to educate themselves while they are teaching.

DEVELOPMENT THROUGH EXPERIENCE

The ordinary college graduate, without experience or professional training, is not fully equipped to teach, any more than the ordinary college graduate without experience is fit to run a bank, or a hospital, or a farm or a store. In order to be a good teacher, the college graduate needs a closer contact with the children and with the actual school and community problems.

The banker largely gets his training in the bank; the merchant, in the store; the farmer, on the farm; the lawyer, in the courthouse. Likewise, we should recognize that the teacher gets much valuable training in the schoolroom, from experience, from supervision, from textbooks and from professional books. By contact with the children and with other teachers, and by help from the teachers' library, the teacher of good ability can grow great in actual service.

BETTER SCHOOLS THROUGH BETTER TEACHERS.

The most important factor for making a good school is the good teacher (not a mere scholar, or bookworm, or pedant, but a well informed, professionally trained, wide awake, reading, growing, tactful, inspiring teacher)— a teacher who awakens the interest of the pupil and by skilful suggestion and organization manages to aid the development of the child largely through his own self-activity. To secure better schools we must have an increasing number of good teachers—teachers capable, trained, unselfish, patriotic, cooperative and full of the spirit of work and service.

The number of good teachers can be increased by better salaries, by a system of promotion of capable and trained and growing teachers, by better supervision, by more professional courses in our colleges, and especially by a better encouragement for the training of teachers in service under supervision and by the study of books on teaching.

MORE TRAINED TEACHERS URGENTLY NEEDED.

As an educator of long experience, I am unhesitatingly calling attention to the need of more trained teachers (trained in college and in service), and at the same time sympathetically trying to point the way for improvement in a constructive manner and by an economical method. I hope these suggestions will prove helpful to many of our ambitious teachers and superintendents, and will meet with a kind reception from all who wish to see better teaching in all of our schools, in the primary grades, in the high schools, in the colleges and universities.

Trusting that each year more attention may be given to the training of teachers in service, through experience, through supervision and through the use of the Teachers' Library, I am,

Cordially yours,

M. M. PARKS,
State School Superintendent.

P. S. The Elementary School Teachers in Georgia especially are urged,

1. To emphasize better work in teaching Reading (oral and silent).

2. To emphasize more thorough teaching of Arithmetic (especially Addition, Subtraction, Multiplication, Division, Simple Fractions, Decimals).

3. To emphasize the teaching of Morals and Manners, Health, Thrift and Citizenship.

4. To read the books in the Reading Course for 1923. (See next page).

5. To read additional books and periodicals. (See this pamphlet).

6. To cooperate loyally with school officials.

To visit the parents of children.

To take a personal interest in each child in school and out of school.

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HEALTH MANUAL

BY

Dr. Dorothy Bocker and Miss Lurline Parker.

AN ACT

To provide physical education and training for pupils in the common, State and all other public schools of Georgia, supported wholly or in part by the State, and to insure better cooperation between the educational authorities and the health authorities of this State, prescribing the methods of carrying the same into effect.

Section 1. Be it enacted by the General Assembly of the State of Georgia, and it is hereby enacted by the authority of the same, that the Georgia State Board of Education shall prescribe a course of study in Physical Education for all common schools of the State, and shall fix the time when said courses shall go into effect. This course shall occupy periods totaling not less than thirty minutes each school day which shall be devoted to instruction in health and safety, to physical exercises and to recess play under proper supervision.

A manual setting out the details of said course of study shall be prepared by the State Superintendent of Schools in cooperation with the State Board of Health and State Board of Education of Georgia, and such expert advisors as they may choose. Said manual when published shall be sent by said State Board of Education to the teachers of the common schools in the State of Georgia.

Section 2. The curriculum of all State Normal Schools of Georgia and of all other institutions in the State supported wholly or in part by State funds having special courses adopted for the preparation of teachers, shall contain one or more courses in physical education and after the first day of July, 1921, each person graduating from a teacher's course in any of these institutions shall have completed one or more courses in physical education.

Section 3. County Boards of Education of cities and of graded common school districts may employ supervisors and special teachers of physical education in the same manner as other teachers are employed, provided they possess such qualifications as the State Board of Education may prescribe.

The Board of Education of two or more school districts, city, graded school or county may jointly employ a supervisor or special teacher of physical education. The Board of Education may allow the use of school buildings or school grounds after the regular school hours and during vacation as community centers for the promotion of play and

other healthful forms of recreation, under such rules and regulations as to them seem proper.

Section 4. All laws in conflict with this Act are hereby repealed.

AIM OF MANUAL.

The aim of this manual is to supply a plan of instruction in physical education, and to give definite material for carrying out this plan, to the teachers of the State of Georgia. The physical education law, which is given above, makes definite demand for the placing of physical education in the curriculum. It is with the idea that the teacher will need aid in carrying out the provisions of the law, that this manual is prepared.

The minimum requirements only are considered, and it is hoped that the manual will be used rather as an outline of the required work than as a complete text book on the subject. A list of references is given and as free a use of these may be made as is consistent with the initial thorough handling of the prescribed material herein given.

DIVISION OF PUPILS INTO GROUPS.

For practical purposes the student body has been divided into three groups, special work being arranged for each group. GROUP I; Primary through third grade (if the fourth grade group is small, through the fourth grade.) GROUP II; Grammar through seventh grade. GROUP III; High school through eleventh grade.

TIME DIVISIONS.

GROUP I.

9:00- 9:10—Hygiene, inspection, clubwork, posture.
10:00-10:02—Two minute drill.
10:00-10:35—Recess.
11:00-11:15—Formal gymnastics (mimetic exercises).
2:00- 2:15—Games.

GROUP II.

9:00- 9:10—Hygiene, inspection, clubwork, posture.
10:00-10:02—Two minute drill.
10:20-10:35—Recess.
11:00-11:10—Formal gymnastics.
2:00- 2:10—Formal gymnastics, games, athletics, folk dancing.
3:00- 3:02—Two minute drill.

GROUP III.

Hygiene, inspection, posture for one or two mornings a week; on the other mornings First Aid.

One period of 30 minutes a day devoted to gymnastics; 15 minutes formal gymnastics and games and athletics or Folk dancing. 15 minutes.

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PHYSICAL EXAMINATION.

VISION.

In testing vision the Smelling Vision Chart, herewith reproduced, is used. The page may be mounted on card board or a copy may be purchased of F. A. Hardy & Co., Atlanta, Ga., at a cost of $0.30, or John Moore & Sons, Wholesale Opticians, Macon, Ga., at a cost of $0.15.

Hang the chart on the wall at a level with the pupil's eyes, be sure the light is good, no shadows, nor window from which the light shines directly into the eyes; when not in use, turn the chart face to the wall so that the children do not memorize the letters; in this connection, it is well not to let the children read the letters in sequence.

It is not necessary to have the child read more than two letters at first. If he does not read these correctly let him read the whole line. A child should be able to read at least six out of eight. It will often be found that incorrect reading is due to a lack of knowing the letter or of carelessness, rather than to a defect of the eye. It is not necessary to examine the children singly—they may be placed in a row of seven or eight, twenty feet distant from the chart Each eye is examined separately, the unused eye being covered with a card held in front of the eye or covered with the hand; as soon as a child has had his turn he must be told to put the hand down at the side, otherwise it will be found that he will press the hand against the eye so firmly that the vision will be blurred; if his hand comes down as soon as he has finished, any blurring will have vanished by the time his turn comes again. If a child cannot read at least six out of the eight letters of the line, he is told to read the line above and so on until he meets the requirement. Occassionally it will be found that a child can distinguish nothing but the number of fingers held up at the distance of twelve inches or less, or even that he can only distinguish light and darkness. Children that wear glasses should be tested wearing them; this will give information as to whether the glasses meet the child's needs.

To record—Use $\surd$ if the child can read 20 foot line at a distance of 20 feet; use $\times$ if child cannot do this, $\times\times$ if vision is very poor.

Where defects of vision have been discovered, the teacher institutes two plans, the immediate one of placing the child in a seat near the blackboard and where he will get sufficient light on his work, relieving him of all but the most necessary close work, remembering that his faults in spelling, reading, etc., may be due to poor eyes and not to plain ignorance; her second plan is to notify the parents, i. e., start her follow-up work by sending the card (also containing a list of the child's other defects), by speaking with the pupil, by speaking with the parent, and again by bringing the matter to the pupil's attention at frequent intervals.

Incorrect posture (Weak or fatigue posture) The neck and trunk form a zig-zag line.

Correct posture (Strong, healthful, beautiful and efficient) The neck and trunk form a straight, vertical line.

Exaggerated posture (Rigid, ugly and incorrect) This posture can be held only for a short time with great effort.

DRAWINGS ILLUSTRATING POSTURE

From photographs furnished by the American Posture League, Inc.

EARS.

To test hearing, a watch is used; this is best if of the loud-ticking Ingersoll type. Such a watch should be heard at the distance of a yard. The hearing of one ear should be tested at a time. The tip of the index finger on the same side as the other ear, being pressed against the small inner lobe of the ear—thus shutting the outer orifice. The children stand in a row—as many as 12 to 14 of them in the above described position; the teacher walks down the row holding the watch at the distance of a yard from the unobstructed ear. The children are cautioned to listen carefully and not to say "yes" unless they really hear the watch. If in doubt, the teacher may have the child close his eyes, and then answer whether he hears the watch as the teacher varies the distance abruptly from beyond hearing distance to a short distance from the ear.

TEETH.

It is both easy and very necessary for the examiner to have a definite knowledge of the condition of the child's teeth. If the child needs any dental work mark $\times$; if the teeth are in very poor condition mark $\times\times$; if the teeth need no dental work mark $\surd$.

CHEST EXPANSION.

The children remove their coats, sweaters, etc. They march in a line to the teacher who is standing in a convenient well-lighted place. She places an ordinary tape measure around the child's chest on a level just over the lower angle of the scapulae (the shoulder blades) posteriorly, and level with the nipples, asteriorly. The child takes a deep breath, the teacher noting the number of inches; then the child exhales violently, the teacher again noting the number on the tape measure; the difference between the two numbers represents the chest expansion.

In this method, the child is permitted to throw back the shoulders and to use the large shoulder, chest and upper back muscles that are attached to the upper chest—the accessory muscles of respiration.

Other things being equal, chest expansion in children furnishes an excellent index as to the condition of the lungs.

POSTURE.

Good posture is important from the psychological and artistic aspect as well as from the pure health aspect. The high heart always seeks an upright posture; the very word "upright," descriptive of a physical position, is also descriptive of a moral attribute.

Aside from both the psychological and artistic value, good posture has a definite health value. The thoracic cavity contains organs which

need plenty of room for maximum efficiency; to get a thorax of maximum size, correct posture is essential. The abdominal cavity contains organs which are very prone to suffer from ptosis, to avoid this the lumbar spine cannot be exaggerated in its forward convexity, and the abdominal muscles must be firm and in a tonic state of contraction; these two are only possible where there is good posture. The feet, contrary to much erroneous teaching, are most hygienically placed, when they are held parallel about two or three inches apart, and used in a straight-ahead and not toeing-out manner when walking. The pelvis should not be tipped at too great an angle; it furnishes a basis for the support of the spinal column.

The thoracic spine is the part usually affected by poor posture, and a condition of round shoulders (kyphosis) ensues. Round shoulders should be corrected only after the rest of the standing position has been changed; they should never be corrected in the manner usually used, "Put your shoulders back" or "Put your shoulders down." Correct the position OF THE UPPER BACK BY EMPHASIZING HOLDING THE CHEST WELL FORWARD and making it as broad as can be. The shoulders themselves are mere appendages of the trunk and as such should be let alone; it is the trunk and not its appendages that concerns us most closely in the matter of posture. Finally, the knees are held stiff and the head is held up so the neck is pressed against the collar band (or an imaginary collar band).

Frequently right-handed people will be found to have the right shoulder lower than the left and the right hip higher than the left, a lateral deviation of the spine which is known as scoliosis. Record good posture with √; poor posture ×; and bad posture ××

HEIGHT AND WEIGHT.

Perhaps the most important part of the physical examination that the teacher gives, is the taking of the height and weight and comparing them with the standard. It is easy to get the height; simply tack two tape measures to the wall, one above the other in a vertical position; the second upside down. To get the weight, a balance scale is necessary. Direction for weighing children are unnecessary, as every teacher is familiar with the procedure.

Accompanying will be found a scale of heights and weights for boys and a similar one for girls, listed according to ages. A part of the taking of height and weight is marking the child's standard weight for his given age.

A child whose muscles are flabby, and who does not gain in weight continuously, even though moderately, is suffering from malnutrition and needs special advice and supervision of the diet.

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School:_____ Grade:_____ Attendance:_____ Date:_____ County:_____

NAME	Vaccination (Smallpox)	Inoculation (Typhoid)	Age	Height	Weight	Standard Weight	Vision	Hearing	Teeth	Chest Expansion	Posture	Follow Up	Eyes	Ears	Throat	Nose	Lungs	Heart	Glands	Nerves	Orthopedic	Anemia	Skin	Pediculosis Capitis	REMARKS

Weights and measures should be taken without shoes and in the usual indoor clothing. Weigh on the same date each month. Compute age at nearest birthday.

HEIGHT and WEIGHT TABLE for BOYS.

Height Inches	5 Yrs.	6 Yrs.	7 Yrs.	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	17 Yrs.	18 Yrs.
39	35	36	37											
40	37	38	39											
41	39	40	41											
42	41	42	43	44										
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60	-----	-----	-----	-----	-----	91	92	93	94	97	99	101	102	
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65	-----	-----	-----	-----	-----	-----	-----	-----	120	122	123	124	125	126
66	-----	-----	-----	-----	-----	-----	-----	-----	125	126	127	128	129	130
67	-----	-----	-----	-----	-----	-----	-----	-----	130	131	132	133	134	135
68	-----	-----	-----	-----	-----	-----	-----	-----	134	135	136	137	138	139
69	-----	-----	-----	-----	-----	-----	-----	-----	138	139	140	141	142	143
70	-----	-----	-----	-----	-----	-----	-----	-----	-----	142	144	145	146	147
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75	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	169	170	171	172
76	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	174	175	176	177

Prepared by Dr. D. T. Wood for the Child Health Organization.

HEIGHT and WEIGHT TABLE for GIRLS.

Height Inches	5 Yrs.	6 Yrs.	7 Yrs.	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	17 Yrs.	18 Yrs.
39	34	35	36											
40	36	37	38											
41	38	39	40											
42	40	41	42	43										
43	42	42	43	44										
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53	-----	-----	-----	66	67	68	68	69	70					
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71	-----	-----	-----	-----	-----	-----	-----	-----	-----	138	140	142	143	144
72	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	145	147	148	149

Prepared by Dr. D. T. Wood for the Child Health Organization.

In addition to all of the above, a teacher can readily learn to detect Pediculosis (head lice), Scabies (the itch), and Tenia Circinata (ring worm). Unusual skin conditions should be noted.

If child suffers from several of the following symptoms he should be excluded from school. (10 minutes daily.)

(1) Headache, (2) Sore Eyes, (3) Inflamed Eyes, (4) Running Eyes, (5) Sore Throat, (6) Frequent Coughing, (7) Earache, (8) Dizziness, (9) Chills, (10) Eruptions, (1) Breathlessness (with no apparent cause), (12) Acute pain, (13) Sneezing, (14) Running Nose, (15) Fever, (16) Nausea, (17) Vomiting, (18) Lassitude, (19) Rapid Pulse, (20) Convulsions, (21) "Fit," (22) Fainting.

The teacher should know and teach the sources, dangers and prophylaxis of Hookworm, Malaria, and Typhoid Fever. There are few districts in Georgia that are not affected by one or more of these. Literature on these subjects may be obtained from the State Board of Health, Atlanta, Ga. Physical examination blanks and follow-up cards may be obtained without cost from the Division of Child Hygiene, State Board of Health, Atlanta, Ga.

MORNING INSPECTION AND HEALTH CLUB WORK.

Object: To promote good health, by inculcating habits of care of the body. (10 minutes daily).

Method: Various methods may be employed. Emphasis should be placed on the habitual practice of the rules of healthy living. Health work is not limited to the four walls of the class room. Active co-operation of all agencies that effect the health of the school children, must be sought.

Group 1. Time should be devoted to promotion of health habits without emphasizing the reasons therefor. Practical illustrations from daily life, together with stories, should be largely used here. The teacher may ask questions on a typical daily inspection, and have children respond in various ways, as standing, showing of hand, teeth, etc. This work shall be correlated with the state adopted text, "Keep Well Stories for Little Folks," Jones.

Group 2. Instruction from the text, "Primer of Hygiene and Sanitation," Caldwell and Ritchie, should be applied in daily practice. Result of instructions should be tested by inspection and questions. To inculcate health habits some form of morning inspection is essential. This may be in the form of any of the following methods given below.

Group 3. Instructions from text, "Healthy Living," Winslow; as per Group 2.

Following is a simple Health Club described in "Teaching Health," Dept. of Interior, Bureau of Education, Washington, D. C.

HUNTERDON COUNTY HEALTH CLUB.

1. Each room elects its own officers, one a month, whose duties shall be:
   1. To keep the school room well-aired.
   2. To keep the school room clean.
   3. To keep the school grounds clean.
   4. To keep out-buildings clean.
   5. To assist in making the daily inspection.

2. Chief pupil officer asks daily inspection questions. Each pupil scores one point when he answers "yes" to a question. The secretary keeps a record of points scored.

3. The daily inspection.
   1. Did you wash your face, hands, neck and ears before coming to school?
   2. Did you brush your teeth last night and this morning?
   3. Are your finger nails clean?
   4. Did you do without tea and coffee yesterday?
   5. Did you sleep with your windows open last night?
   6. Did you comb and brush your hair before school?
   7. Did you try to sit, stand and walk correctly yesterday?
   8. Did you keep your desk and surroundings in order yesterday?
   9. Did you drink eight glasses of water yesterday?
   10. Have you a clean handkerchief?
   11. Did you use your own drinking cup yesterday?
   12. Did you sleep without a pillow last night?

4. Weekly inspection.
   1. Did you use your own towel every day last week?
   2. Did you take at least three baths last week?

   (Other questions in regard to local needs may be added.)

5. The health club may be a feature for week-end meetings, using compositions on special health topics, reports, readings, and dramatics concerning health, with occasional exhibits.

Helpful Material—"Cho Cho and the Health Fairy," Child Health Organization, New York City; "Child Health Alphabet," Child Health Organization, New York City; "The Health First Reader," Strobridge Lithographing Co., Cincinnati, Ohio; "Teaching Health," Government Printing Office, Washington, D. C.; "How to Live Long," Metropolitan Life Insurance.

II. THE MODERN HEALTH CRUSADE.

This is an aid in translating knowledge of the fundamentals of hygiene into practice, bringing as it does, a distinct influence serving to re-inforce the established courses in hygiene, physiology, physical

training and sanitation. It does not conflict with such courses, but adds vitality by supplying the will to do the indirect motive—until the daily practice of the laws of health become habitual. (See appended chart.) Further information may be obtained from director Modern Health Crusade, Raoul Foundation, State Board of Health, Atlanta.

Statement of Chores.

1. I washed my hands before each meal today.

2. I washed not only my face but my ears and neck and I cleaned my finger nails today.

3. I kept fingers, pencils and everything likely to be unclean or injurious out of my mouth and nose today.

4. I brushed my teeth thoroughly after breakfast and after the evening meals yesterday.

5. I took ten or more slow, deep breaths of fresh air today. I was careful to protect others if I spat, coughed or sneezed.

6. I played outdoors or with windows open more than thirty minutes today.

7. I was in bed ten hours or more last night and kept my windows open.

8. I drank four glasses of water, including a drink before each meal, and drank no tea, coffee, nor other injurious drinks today.

9. I tried hard today to eat only wholesome food and to eat slowly. I went to toilet at my regular time.

10. I tried hard to sit up and stand up straight; to keep neat, cheerful and clean minded; and to be helpful to others.

11. I took a full bath on each of the days of the week that are checked (√).

FIRST WEEK

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

TWO MINUTE DRILL.

GROUP I.

FIRST TERM.

1. Stretching.
2. (a) Flexion and Extension of fingers.
   (b) Shaking the wrists (hands).
3. Marching.
4. Breathing.

SECOND TERM.

1. Stretching.
2. (a) Arm Raising.
   (b) Above in rhythm.
3. Marching.
4. Breathing.

EXPLANATORY—

STRETCHING.

This is a simple form or relaxing exercise which is used at the beginning of the Two Minute drills throughout the various groups. Take a deep breath, bend the elbows, keeping them close to the sides, hands touching shoulders, then stretch the arm out sideways, or one forward and one back or sideward-upward. This is the ordinary stretch that is usually accompanied by a yawn, and should be done without count, slowly and informally.

FLEXION AND EXTENSION OF THE FINGERS.

Close and open the fingers forcibly with arms in following positions: arms hanging at the sides, then arms horizontal, then overhead, etc. Ten times in each position.

SHAKING THE WRISTS (HANDS).

Place arms in above described positions and shake the hands vigorously, trying to limit the motion to the wrists; ten counts in each position.

MARCHING.

About room; alternate lines face the rear of the room so that the children may form one continuous line marching down each aisle; the line to the left faces front and leads around the room; stop when back at own place.

Two Minute Drill.

Training School, G. N. & I. College.

BREATHING.

With hands on hips for the first term and with hands on shoulders for the second term; the object is to get the children to take long, slow deep breaths; the teacher counts ten as the children inhale and counts ten as they exhale.

ARM RAISING.

From a good upright position; raising the arms sideward to shoulder level, palms down; then return to starting position.

IN RHYTHM.

The above exercise to count; One, the arms go out; Two, they go down; Three, up and so on to eight or sixteen counts.
(All windows open, all coats and sweaters removed.)

GROUP II.

FIRST TERM.

1. Stretching.
2. (a) Arm stretching.
   (b) About face.
3. Hopping.
4. Breathing.

SECOND TERM.

1. Stretching.
2. (a) Arm stretching.
   (b) About face.
3. Hopping.
4. Breathing.

EXPLANATORY—

STRETCHING—(AS IN GROUP I.)

STRETCHING.

Starting positions taken on the command, One! This is arms upward bend, hands at sides of shoulders, elbows bent and well down at the sides. Two! The arms are stretched sideward as far as they will go, at shoulder level, with the palms down. Three! The arms are again returned to the starting position; the procedure is to continue through sixteen counts. The children should be told what exercise is to follow before the initial count is given.

Arm stretching is with arms sideward, or upward, or downward, or backward, or diagonally upward (sideward-upward). For the first

term this is stretching with both arms sideward, upward, forward, etc. For the second term the arms go in different directions, the teacher giving the initial cue as to direction and then counting as the exercise is done in series.

About Face.

Carry the toe of the right foot about a half foot length to the rear and slightly to the left of the left heel without changing the position of the left foot; face to the rear turning to the right on the left heel and the right toe; place the right heel by the side of the left. As the turn is made the heels will come together.

Hopping.

Place the right foot to the right, throw the entire weight upon it suddenly, at the same time lifting the left foot off the ground. The shift of weight is made with a leap. It is really a "Step, Hop." Do this in place, hopping from left to right and right to left eight times the first term. For the second term, go forward three or four times, then face to the rear and go back to place in the same way.

Breathing.

Deep breathing with arms raising sideward, shoulder level, as the child inhales, and arms sinking back to the sides as the child exhales. This is done in the first term. The second term the child breaths in a similar manner, except that the arms are raised sideward-upward.

(All windows open, all coats and sweaters removed.)

GROUP III.

First Term.

1. Stretching.
2. (b) Arms forward—Stretch! From the position of hands on hips.
   (b) Left (R) knee, and right (L) heel—Raise!
3. Jumping.
4. Breathing.

Second Term.

1. Stretching.
2. (a) Arms sideward and left (R) leg sideward—Raise.
   (b) Above in rhythm.
3. Jumping to stride standing position.
4. Breathing.

EXPLANATORY—

STRETCHING —(As in Group I.)

Arms Forward-Stretch.

As in Group II except that in the starting position the hands are placed on the hips with the thumbs pointing backward.

Left (R) Knee, and Right (L) Heel—Raise.

This is taken with the hands on the hips above; the bent knee is brought up to a right angle, while the right heel is raised from the floor; this is a difficult balance movement and should be done slowly to command, at first, and then to slow counting.

Jumping.

The feet are brought to stride position (that is about fourteen inches apart), and then in the second jump they are brought back to the starting position. At first this exercise is to be done to command and then later it may be done to count. In the second term this may be speeded up until the children do it as quickly as the teacher can count.

Breathing.

Deep breathing with arm raising forward, swinging them sideward and inhaling; letting them sink to the sides and exhaling; this should be done slowly to three counts. In the term the breathing is accompanied by raising the arms forward-upward.

(All windows open, all coats and sweaters off.)

GYMNASTIC LESSONS

GROUP II.

LESSON I.

MARCHING—

Attention.
Parade rest.
Facing.
Right, Left, About, Half face.
Stepping
Forward, back side, guiding.
Marching
Forward, backward, guiding and halting.

MASS DRILL—

(a) Arms forward—Raise!
Position!
(b) Hips firm—Deep knee-bend!
Position!
(c) Arms upward—Bend! Trunk forward—Bend!
Position!
(d) Arms sideward—Raise! Trunk forward—bend and left forward—Lunge!
Position!

SPEED EXERCISE—

Double time marching around room (this is run, coming in course of marching).

BREATHING—

Arms sideward raise—inhale! Arm down—exhale!

LESSON II.

MARCHING—

As previously.
Column right (left).
Mark time.

MASS DRILL—

(a) Arms sideward—Raise!
Position!
(b) Hips—Firm! Deep knee—Bend!
Position!

(c) Arms sideward—raise and trunk to left—Twist!
Position!
(d) Arms sideward—raise, trunk left twist and left sideward—Lunge!
Position!

SPEED EXERCISE—
Double time marching.

BREATHING—
Arms sideward—Raise—Inhale; sideward downward—Sink—Exhale!

LESSON III.

MARCHING—
As previously.

MASS DRILL—
(a) Arms backward—Stretch!
Position!
(b) Hips—Firm! Left forward—Lunge!
Position!
(c) Arms forward—Raise! Right knee—Bend! Left leg backward—Extend!
Position!
(d) Arms sideward—Raise! Left sideward—Lunge! Trunk to left—Bend!
(Touch floor with hand.)
Position!

SPEED EXERCISE—
See previous lessons.

BREATHING—
See previous lessons.

LESSON IV.

MARCHING—
See previous lesson.

MASS DRILL—
See previous lesson.
(a) Arms forward upward—Raise!
Position!
(b) Hips—Firm! Left leg forward and right heel—Raise!
Position!
(c) Arms sideward, left leg sideward and right heel—Raise!
Position!
(d) Arms sideward, left (R) leg sideward and right (L) heel—Raise!
Position!

SPEED EXERCISE—

Stationary hop (in Place); first on right foot then on left.

BREATHING—

See previous lesson.

LESSON V.

MARCHING—

See previous lesson.

MASS DRILL—

(a) Arms forward—Raise!
Position!
(b) Hips—Firm! Deep knee—Bend!
Position!
(c) Arms sideward-upward—Raise! Heels—Lift!
Position!
(d) Arms sideward-upward—Raise! Trunk to the left—Bend! Heels—Raise!
Position!

SPEED EXERCISE—

Skipping.

BREATHING—

See previous lesson.

LESSON VI.

MARCHING—

See previous lesson.

MASS DRILL—

(a) Arms forward—Bend! (Bend elbows and bring hands to position in front of the chest, elbows shoulder high, wrists unflexed and palms facing floor).
Position!
(b) Hips—Firm! Deep knee—Bend!
Position!
(c) Arms forward and deep knee—Bend!
Position!
(d) Arms forward bend, jump with a quarter turn to left, to deep knee—Bend!
Position!

SPEED EXERCISE—

See previous lesson.

BREATHING—

See previous lesson.

LESSON VII.

MARCHING—
See previous lesson.
Change step.

MASS DRILL—
(a) Arms upward—Bend! (Bend arms at elbows, place hands next the outer side of the shoulder, elbows held close to sides, chest up).
Position!
(b) Hips—Firm! Heels—Raise!
Position!
(c) Arms upward bend and feet sideward—Place! (Stride standing position).
Position!
(d) Jump forward (landing on toes) and arms sideward—Raise!
Position!

SPEED EXERCISE—
Skipping!

BREATHING—
See previous lesson.

LESSON VIII.

MARCHING—
See previous lesson.
To the rear.

MASS DRILL—
(a) Left arm forward, right arm sideward—Raise!
Position!
(b) Hips—Firm! Left leg forward—Raise!
Position!
(c) Arm sideward and left leg sideward—Raise!
Position!
(d) Left arm sideward—Raise! Trunk to left, bend and left—Lunge!
Position!

SPEED EXERCISE—
Stationary run (run in place).

BREATHING—
See previous lesson.

LESSON IX.

MARCHING—
See previous lesson.
Right (left)—Dress!

MASS DRILL—

(a) Arms forward, and left (right) leg forward—Raise!
Position!

(b) Arms forward, raise and left leg forward—Lunge!
Position!

(c) Arms sideward, raise, one-quarter left turn and left—Lunge!
Position!

(d) Arms forward raise and left leg forward, right leg backward —Jump!
Position!

SPEED EXERCISE—

See previous lesson.

BREATHING—

Arms sideward raise, (inhaling as the arms go up and exhaling as the arms come down), and right foot forward—Place!
Position!

LESSON X.

MARCHING—

See previous lesson.

MASS DRILL—

(a) Left arm forward—upward, right arm backward raise, and left leg forward—Place!
Position!

(b) Left arm sideward—upward, right arm sideward, and left sideward—Lunge!
Position!

(c) Arm forward bend and feet sideward—Place!
Position!

(d) Trunk forward bend, swing arms forward, and feet sideward—Place!
Position!

SPEED EXERCISE—

Springing upward landing on toes.

BREATHING—

See previous lesson.

GROUP III.

LESSON I.

MARCHING—

Review marching.
Eyes—Right! (Left).

Deep Knee Bend.

MASS DRILL–

(a) Arms forward raise and knee halfway—Bend!
Position!

(b) Arms upward bend, and feet sideward—Place! (with jump).
Position!

(c) Arms forward-upward stretch and deep knee—Bend!
Position!

(d) Arms sideward raise lunge left sideward and trunk left—Bend! (left hand to floor).
Position!

SPEED EXERCISE—

Stride standing position, alternate one foot in front of other (with jump).

BREATHING—

As last lesson of Group I.

LESSON II.

MARCHING—

See previous lesson.

MASS DRILL—

(a) Arms forward—Bend! Left arm upward and right arm downward—Stretch!
Position!

(b) Hips—Firm! Deep knee—Bend! Left foot forward—Lunge! To starting position—Return!
Position!

(c) Left arm forward-upward raise and left (R) forward—Lunge!
Position!

(d) Arms forward raise and deep knee—Bend! (Swing arms between legs). Trunk forward bend, to stride position—Jump! Return to first position!
Position!

SPEED EXERCISE—

Hopping on right and left foot alternately for sixteen counts.

BREATHING—

Respiration with arms raising sideward, alternate foot placing forward and bending of the forward knee, inhale on first count, exhale on second!

LESSON III.

MARCHING—

See previous lesson.

MASS DRILL—

(a) Arms forward-upward—Raise!
Arms forward—Swing!
Return to starting position.
Position!

(b) Hips—Firm!
Feet sideward—Place!
Left (R) leg forward—Lunge!
Return to starting position.
Position!

(c) Arms sideward-upward—Raise! Stride position—Jump!
Arms downward-backward raise and left (R) leg backward—Lunge!
Position!

(d) Arms sideward raise and feet sideward—Place!
Arms downward between legs—Swing!
Trunk forward bend and return to starting position.
Position!

SPEED EXERCISE—

Hopping, raising right foot in front of opposite knee.

BREATHING—

See previous lesson.

LESSON IV.

MARCHING—

See previous lesson.
Right by squads.

MASS DRILL—

(a) Arms forward—Bend!
Arms forward—Stretch!
Return to starting position.
Position!

(b) Hips—Firm!
Heels—Raise!
One-quarter right (L) turn and left leg (R) sideward—Lunge!
Return to starting position.
Position!

(c) Arms upward, bend and heels—Raise!
Arms sideward, raise, one-quarter left (R) turn and left (R) forward—Lunge!
Return to starting position.
Position!

(d) Arms forward bend and heels—Raise!
Position!

Arms downward between legs, one-quarter turn right, bend trunk forward, and left sideward—Lunge!
Return to starting position.
Position!

SPEED EXERCISE—
Running in place with knees high.

BREATHING—
Arms sideward raise, right (left) foot forward place and heels—Raise! Position!
(Inhale on count one and exhale on count two.)

LESSON V

MARCHING—
See previous lesson.

MASS DRILL—
(a) Left arm forward-upward and right arm backward—Raise!
Arms forward—Swing!
Return to starting position.
Position!
(b) Hips—Firm!
Left (R) sideward—Lunge!
Left (R) leg forward raise and right (L) knee—Bend!
Return to starting position!
Position!
(c) Arms backward raise and left backward—Lunge!
Arms forward-upward raise left (R) leg forward raise and right (L) knee—Bend!
Return to starting position!
Position!
(d) Left arm sideward-upward, and right arm sideward-downward. raise and left sideward—Lunge!
Arms sideward, raise, trunk right (L) sideward bend, left (R) leg forward raise and right (L) knee—Bend!
Return to starting position!
Position!

SPEED EXERCISE—
Running in place feet raised forward (kicking).

BREATHING—
See previous lesson.

LESSON VI.

MARCHING—
See previous lesson.

MASS DRILL—

(a) Arms sideward—Raise!
Left arm overhead, right arm behind back—Swing!
Return to starting position!
Position!

(b) Hips—Firm!
Touch step left forward—One!
Lunge left forward—Two!
Return to starting position—Three!
Position—Four!

(c) Arms sideward, touch left sideward—One!
Left arm over head, right arm behind back, lunge left sideward —Two!
Return to starting position—Three!
Position—Four!

(d) Left arm upward, right arm sideward, lunge left sideward—One!
Arms sideward, bend trunk sideward (touch left hand to floor)—Two!
Return to starting position—three!
Position—Four!

SPEED EXERCISE—
Skipping forward and backward.

BREATHING—
See previous lesson.

LESSON VII.

MARCHING—
See previous lesson.

MASS DRILL—

(a) Arms forward, step left forward—One!
Arms sideward, bend left knee—Two!
Return to starting position—Three!
Position—Four!

(b) Arms sideward raise, step left sideward, bend left knee—One.
Flex arms (hands to shoulders) bend trunk left (R)—Two!
Return to starting position—Three!
Position—Four!

(c) Arms forward raise, lunge left forward—One!
Arms sideward, raise, bend trunk forward—Two!
Return to starting position—Three!
Position—Four!

(d) Arms sideward, raise, bend trunk left (R), lunge left (R) sideward (left (R) hand to floor)—One

Swing arms between legs, bend trunk forward and bend both knees—Two!
Return to starting position—Three!
Position—Four!

SPEED EXERCISE—
Jump to stride, then back, with right foot crossed in front of left, and bend forward knee.

BREATHING—
See previous lesson.

LESSON VIII.

MARCHING—
See previous lesson.
On right (left) in line.

MASS DRILL—
(a) Arms forward-upward raise, lunge left forward—One! (L).
Arms forward raise (downward and backward) bend right knee, straighten left (R)—Two!
Return to starting position—Three!
Position—Four!

(b) Arms forward-upward raise and lunge left backward—One!
Arms forward, raise (downward and backward) bend trunk forward—Two!
Return to starting position—Three!
Position—Four!

(c) Arms cross in front of chest, deep knee bend—One!
Uncross arms and stretch upward in a letter Y position, jump to stride—Two!
Return to starting position—Three!
Position—Four!

(d) Arms forward bend—One!
Arms backward raise (downward to behind back), bend trunk forward, lunge right forward—Two!
Return to starting position—Three!
Position—Four!

SPEED EXERCISE—
See previous lesson.

BREATHING—
See previous lesson.

LESSON IX.

MARCHING—
See previous lesson.

MASS DRILL—

(a) Arms sideward-upward, step left backward—One!
Right arm downward and left forward, quarter turn left on heels—Two!
Return to starting position—Three!
Position—Four!

(b) Arms backward raise, lunge forward—One!
Left arm upward, right arm backward, raise, quarter left turn on left foot, lunge sideward right—Two!
Return to starting position—Three!
Position—Four!

(c) Left arm backward, right upward, lunge left obliquely forward—One!
Reverse positions of arms, bend right sideward, quarter right turn—Two!
Return to starting position—Three!
Position—Four!

(d) Arms backward raise and lunge left leg backward—One!
Arms forward-upward raise and lunge left leg forward—Two!
Arms sideward raise one-quarter right turn on heels bend right (L) knee and raise left (R) leg forward—Three!
Position—Four!

SPEED EXERCISE—

Galloping left foot leading.

BREATHING—

Arms forward—upward raise and right (L) foot forward Place! Position!

Inhale during first part, exhale during second part.

LESSON X.

MARCHING—

Review all.

MASS DRILL—

(a) Arms forward raise and touch step left forward—One!
Arms sideward raise and lunge left forward—Two!
Arms upward raise and left (R) leg to the right (L) deep knee bend—Three!
Position—Four!

(b) Prone falling position—One! (squat, place hands between knees on floor) Spring backward vigorously—Two! (body in stiff position, only hands and toes touching floor).
Spring back to squat position—Three!
Come to standing position—Four!

(c) Arms sideward raise and lunge left sideward—One!
Arms upward raise and lunge left forward—Two!
Arms downward-backward raise lunge left backward—Three!
Position—Four!

(d) Half standing position, raise right (L) leg backward, bend left (R) knee, bring body to horizontal position, hands on hips—One!
Return to position—Two!

SPEED EXERCISE—

Gallop with left foot leading.

BREATHING—

See previous lesson.

Cage Ball.
(For description see reference list.)

GAMES AND ATHLETICS

GROUP I. (A) DRAMATIC GAMES.

GATHERING APPLES.

1. Gallop to orchard. (Around rows of desks, holding reins, gallop step.)
2. Look for apples.
3. Put ladder up to tree and climb it.
4. Pick apples and put in baskets.
5. Gather up baskets and gallop home.

INDIANS

1. Walk slowly on toes as with moccasins on, bodies bent.
2. Look for tracks, shield eyes with one hand.
3. Listen for sounds with hand behind ear.
4. Shoot arrows; kneel on one knee, stretch arms and aim.
5. Draw back and make hissing sound for arrow.
6. Run forward and pick up game, throwing over shoulder.
7. Walk home, breathing deeply.

SHOEMAKER AND ELVES.

1. Tired shoemaker works slowly.
2. Gets sleepy, retires.
3. Elves dance lightly in.
4. Elves make shoes.
5. Elves disappear at daybreak.
6. Shoemaker surprised to find shoes finished.
7. Shoemaker and wife make clothes for elves.
8. Elves don new clothes and dance for joy.

Similar games may be worked out—Building a fire, Landing of Pilgrims, Making a Garden, etc.

(B) GROUP GAMES.

1. Cat and Rat.

Players in circle, hands joined. One player is the cat outside the circle, another the rat, within. The rat says, "I am the rat." The cat says, "I am the cat." The rat says, "You can't catch me." The cat says, "Yes, I can." The cat then gives chase to the rat, the players assisting the rat by letting him pass under arms, but try to foil efforts of cat. When rat is caught, new players are chosen.

2. Circle Ball.

Players in circle three feet away from each other. Several balls or bean bags may be used. They are put into play, following each other

in quick succession and in regular order around the circle. Any player failing to catch the ball, sits down. He who stands longest wins.

3. Circle Toss.

Two balls or bean bags are used. Players in circle number by twos Two players, a number 1 and a number 2, are in the center, with a small circle (3 feet in diameter), back to back.

At a signal play begins. Center player No. 2 begins likewise on opposite side of circle. This is continued around the circle to the right, No. 1, center, tossing to circle player No. 1; No. 2 to No. 2. The team wins that completes the circle first.

4. Slap Jack.

Players in circle grasp hands. One player runs around outside of circle and tags another, who immediately runs in opposite direction. Each tries to get back first to vacant place. The one left out is runner next. This is varied by having players bow and shake hands as they meet.

5. Squirrel in Trees.

Players stand in groups of three, two grasping each others' hands, forming a hollow tree. Within each tree is a squirrel. There is one old squirrel in center of circle. Teacher claps hands or blows whistle, a signal for all squirrels to run for other trees, the odd one trying to secure a hollow tree.

SINGING GAMES—

1. Wash Dolly's Clothes.
2. Farmer in the Dell.
3. Briar Rose Bud.
4. Looby Loo.

(C) INDOOR GAMES.

1. Cat and Mice.

Choose a player for cat, who hides behind teacher's desk. Teacher beckons to five or six players, who creep softly up to desk and when all are assembled, scratch on it with their fingers. At this the cat gives chase to the mice, who may save themselves only by getting back to their seats. The mouse caught changes place with the cat. A different set of mice should be chosen each time.

2. Squirrel and Nut.

All players but one sit at desks with eyes closed and a hand outstretched. The old squirrel, carrying a nut (crayon), runs quietly about the aisles and drops the nut into one of the waiting hands. The player

who gets the nut chases the squirrel, who is safe only when he reaches his nest (seat). If he is caught before he reaches his nest he must be squirrel again; otherwise the player who received the nut is the next squirrel. The other players wake to watch the chase.

3. Changing Seats.

Teacher gives the command, "Change right," whereupon each pupil slips from his own seat to the one across the aisle to the right, the pupils in the farthest right hand row standing in the outside aisle. If "Change left" is next given, pupils slip back into their own seats. The row that has just been standing resumes its own seats. In the same way, "Change forward" and "Change backward" may be given. This may be varied by the displaced players taking the vacant seats.

4. Catch Basket.

Class stands in circle, each half constituting a team, with a leader at one end. Place basket or box on a desk in center of room. Teams alternate turns in throwing a bean bag or ball into the basket. Umpire stands in center to return bag to next player after each throw. Each time the bean bag lodges in the basket or on the edge of basket, it scores one for the throwing team. Game may end when each player has had a turn, or may be limited by time, the team winning with the highest score at end of ten minutes.

5. Hand Over Head Bean Bag.

As many bean bags as there are rows to play, are required. Equal number of players are seated in each row of seats. On each front desk is a bean bag. At a signal the first player in each row lifts the bean bag over his head and drops it toward the desk behind him, then clasps his hands on his desk. The next player passes it back in the same way, and so on until it reaches the rear of the line. When the last pupil receives it he runs forward to the front desk. The entire row of players move backward one seat and the player who ran forward takes the front seat, immediately passing the bag backward as before. The game ends when the original occupant of the front seat has again returned to it. The row wins whose leader first does this.

6. Did You Ever See a Lassie?

7. Follow the Leader.

A resourceful player is chosen leader. The others form in single file behind and imitate anything he does. The leader aims to keep the line moving, anyone failing to perform the required feats goes foot.

GAMES FOR GROUP II.

1. Bombardment.

Materials needed: As many empty bottles or Indian clubs as players and a basket ball or volley ball. The ground is divided into two equal fields by a line. At equal distances (two steps on each side from center line), a row of empty bottles or Indian clubs is set up. The players are divided into two teams consisting of five to twenty players each. Each player stands behind a bottle. The object of the game is to knock down the opponent's bottles. Each player serves both as a thrower and a guard to protect his bottle, which he does by bending over and holding palms outward in front of bottle. Any player throws who can secure the ball. A player is out of the game if he steps across the center line, or if his bottle falls for any reason. The team which completely annihilates the other wins.

2. Overhead Relay.

Players line up in two or more equal rows. The leader of each row "toes" a line and holds a basket ball, bean bag or other object. At a signal he passes the ball backward over his head to the player next behind him, who in turn passes it backward as rapidly as possible, and so on until it reaches the last player in the line. He at once runs forward, carrying the ball to the front of the line, which moves backward one place to make room for him. He "toes" the line and passes the ball backward as before. The game continues until the leader reaches the end of the line and runs forward to his original place, giving a signal (holding the ball up) that his team has finished. The row wins whose leader is the first to return to his place.

3. Hopping Relay Race.

A starting line is drawn, behind which the players stand in two or more rows, facing a goal.The goal should be ten or more feet from starting line and may consist of a wall or drawn line, or stakes, chairs, etc. At a signal the leader of each row hops on one foot to the goal, touches it and hops back to the end of his row, which has moved forward to fill his place as he started. He tags the first player in the line as he passes him (or gives him a ball, bottle or other object carried), and this player at once hops forward to the goal. Each player thus takes his turn, the line winning whose last player first reaches the rear of his line and raises his hand as signal. (For other Relays see reference list.)

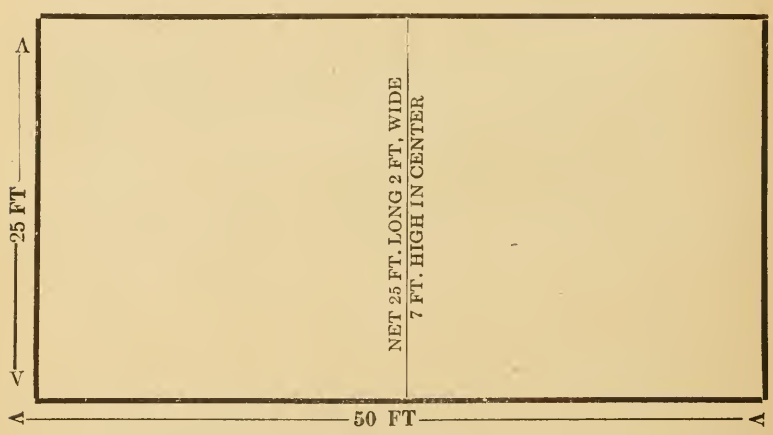
4. Circle Dodge Ball.

Players are divided into two equal groups. One group forms a circle (the larger the circle the greater the sport). The other group stands within the circle, scattered promiscuously about the field of play. The object of the game is for the circle men to hit the center men with a basket ball, the center men dodging to evade this. Any player hit on

any part of his person withdraws from the game. At the end of two minutes, as well as at the beginning of game, the referee blows whistle, and counts center men who haven't been hit. The groups as originally constituted change places, center men becoming circle players and the circle players scattering within. Some time limit is given this group to dodge the ball thrown by circle players. Those who successfully dodge it are counted. The side wins which had the greatest number to escape being hit. (Progressive Dodge Ball is an excellent game. See reference list.)

5. Volley Ball.

This game consists in keeping a volley ball in motion back and forth across a high net. The court is 25 by 50 feet. A tennis or volley ball net or wire or rope is stretched across the center of the ground, the top of the net is 7 feet above the ground at the center.



As many as thirty players are evenly divided into two teams, which are placed on opposite sides of the net. The ball is put into play by the player who is to score, standing on the rear line and batting the ball with open hand, upward over the net. If the ball goes over the net without touching it, it must be batted back by the opponents. The ball is in play as long as it is batted back and forth across the net; as soon as one side fails to return it, whether by letting it fall to the ground or batting it outside the court, it is out of play, scores one point for the side that served it; the same person serves again, and so on until the ball fails to go over the net, or is sent out of bounds or is successfully returned by the opponents. Then the service of the ball, and with it the privilege of scoring, passes to the opponents. Any number of players may strike the ball to send it across the net, after it has been sent ten feet by the server, but no player may strike more than twice in succession. If a player touches the net the ball is put out of play. Should this player be

Sparta Play-Ground. Equipped by Woman's Club.

on the serving side, his side loses the ball; should he be on the receiving side, the serving side scores a point. One point is scored by the opponents whenever a player catches the ball or holds it for and instant. The game consists of twenty-one points.

6. Newcomb.

Played with a basket ball or a volley ball on a volley ball court. This game is like volley ball, with the exception that there is no net and the server tosses the ball, and the receiving side catches it and throws it back to the serving side. If the receiving side lets it hit the ground the serving side scores a point, as in volley ball. If the ball is tossed out of bounds it goes to the other side. The game consists of twenty-one points.

7. Kick It.

A football or a playground ball is used. Draw two lines 50 feet apart. Divide players into two equal teams. Each team stands before a line. Ball is placed at a center point between the two lines. The three first players on each side come forward and place one foot each (six feet in all) on the ball. At a signal, each player tries to kick the ball beyond the opponents' line. If he succeeds, a point is scored. These players then return to their places and the next three in order start as before. A ball kicked higher than the waist, or out of bounds, cannot score.

8. German Bat Ball.

Mark a home base and drive a stake or place something for a goal 40 feet away. Players are in two equal teams, one at bat, the other in the field. A basket ball or a volley ball is used. Batters toss ball up and bat it with open palms. Game proceeds as baseball.

Base Ball (reference list), Tennis (reference list), Captain Ball, Progressive Dodge Ball (reference list).

INDOOR GAMES—GROUP II.

1. Automobile Relay.

Only alternate rows of children may play. Rows 1, 3, 5 may play, then 2, 4 and 6 play. Otherwise somebody is liable to be hurt.

There must be the same number of children in each of the contesting rows and the distance around each row of desks the same. This can sometimes be accomplished by using chairs to make out some short row.

Each row is named some kind of automobile. The first child in rows 1, 3 and 5 stands on the right of his desk. At the signal from the teacher he runs forward, around the back of row of desks in which he sits and up the next aisle, back to his own seat and sits down. (See diagram). Immediately the second child in the row does the same (without waiting for the signal from the teacher). He must rise on the right, run forward first, then turn and go around his own row. Each

child runs in turn, and the game is over when the last child is back in his seat. The row whose last "'car" was back in its "'garage" wins.

2. Bean Bag Throw.

Players are divided into single files of equal numbers. A small ring measuring 12 to 18 inches in diameter is drawn on the floor opposite each group of players. Leader of each row toes starting line 10 to 15 feet from row of circles. Each row is provided with six bean bags (or blocks of wood, stones, etc.). At a signal the leader of each row throws each of his bags in succession toward the circle and scores one point for each bag that lands within the circle. A bag touching the line does not score. The player then takes up his bag and runs back to the rear of the line, giving the bag as he passes to the front player of his row, who should have moved up to the starting line. The second players all begin throwing on a signal. The line wins which has the highest score when all have thrown. Each player at the throwing may step to the blackboard and record his score.

3. Blackboard Relay.

This game is adapted to grammar (sentence construction), spelling, arithmetic, etc. Class is seated with an even number of pupils in each row. A piece of crayon is given to the last player in each row, all of whom, at a given signal, run forward and write on the blackboard at the front of the room a word suitable to begin a sentence. The runner then returns to his seat, handing the crayon to the player next in front of him, who runs forward and writes one word after the first one, to which it must bear an intelligible relation. In this way each player in the row adds to the sentence being written by his own row, the last player being required to write a word that shall complete the sentence; he also adds punctuation marks.

The points scored are 25 for speed, 25 for spelling, 25 for writing, and 25 for grammatical construction. The team wins which scores the highest number of points.

To correlate with geography, the names of mountain ranges, rivers, capital cities, products, etc., may be written. In history the names of famous men, battles, discoveries, etc., may be written.

GAMES AND ATHLETICS—GROUP III.

1. Basket Ball.

(Basket ball for Men—E. D. Angell (Thos. E. Wilson & Co.); Basket Ball for Women—D. Bocker (Thos. E. Wilson & Co.). Reference list).

2. Corner Ball.

A basket ball or volley ball is used. The ground is marked off 25 by 30 feet, which is divided across center by a straight line; in the farther

corners of each half made, a small square goal is marked out, there being two such goals in each court. Ten to 30 players are divided into two equal teams, each of which takes position on one side of the ground and stations a goal man in each of the goals at the rear of the opposite side.

The object of the game is to throw the ball over the heads of the opposing party to one's own goal men, who are at the rear of the opponent's court. Players on each side guard the goals at their rear and try to intercept before it reaches these goals. They will also try to throw the ball over the heads of opponents to their own goal men in the opposite court; no line crossing allowed. Every ball caught by a goal man scores one point for the team throwing. The first side scoring twenty points wins the game.

3. Running and Catching Relay.

Basket balls or volley balls are used. A rope 20 to 30 feet long is tied 8 feet above the ground between two posts or trees. Players are divided into equal lines, which line up behind a starting line 15 feet away from rope. At a signal, the leader of each file runs forward, tosses the ball up and over the rope, and catches it before it hits the ground. He then runs to the rear of his row, giving his ball as he passes to the second player, who has moved up to the starting line. The game is continued until each player has successfully done this. If he misses he keeps trying until he gets it. The team wins whose last man first finishes.

In addition Captain Ball, Base Ball, Volley Ball, Progressive Dodge ball, German Bat Ball.

For description see previous Group.

FOLK DANCING.

Following is a list of Folk Dances that may be used in communities where the sentiment is not opposed, and where music can be obtained; much of the music appears on Victrola records. For a description of the dances see reference books.

GROUP I.

The Chimes o' Dunkirk.
Danish Dance of Greeting.
Kulldansen.
Tantoli.
Nigarespolska.
Swedish Klappdans.
Bleking.
Indian Dance.

GROUP II.

Shoemaker's Dance.
Hopp, Mor Annika.
Ace of Diamonds.

Friends—A Health Pantomine

Irish Lilt.
Oxdansen.
Komarno.
Kamarinskaia.
Strasak.

GROUP III.

Reap the Flax.
Tarantella.
Minuet.
Virginia Reel.
Gustof's Skol.
English May Pole Dance.

A HEALTH PANTOMIME.

I. The Child.
   A. Wanders about in a listless manner.

II. The Enemies.
   A. Enter singly and argue with the child, who finally goes to bed.
   B. Enemies are:
      1. Late Hours.
      2. Tea, Coffee and Coca Cola.
      3. Candy.
      4. Dirt.
      5. Feather Duster.
      6. Common Drinking Cup.
      7. Roller Towel.
      8. Closed Window.
      9. Fly.
      10. Mosquito.
      11. Hook Worm.
      12. Disease Germs.

III. The Friends.
   A. Enter singly, summoned by Health Fairy.
   B. Friends are:
      1. Fresh Air.
      2. Sunshine.
      3. Pure Water.
      4. Nutritious Food.
         a. Milk.
         b. Vegetables.
         c. Fruit.
         d. Eggs.
      5. Soap.
      6. Tooth Brush.
      7. Rest.

Enemies.

A Health Pantomime.

IV. The Combat.

A. Recurrent advance and retreat of Enemies before onslaught of Friends.

B. Final defeat and retreat of Enemies.

V. Dance of Triumph.

A. The Child and the Health Fairy with her crew.

A series of fifteen Health Playlets, published in leaflet form, may be secured for two cents each, post paid, from The National Association for the Study and Prevention of Tuberculosis, 105 East 22d street, New York.

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HYGIENE.

Andress—Health Education in the Rural Schools.
Dressler—School Hygiene.
Hoag and Terman—Health Work in the Schools.
Hough and Sedwick—The Human Mechanism.
Terman—The Hygiene of the School Child.

FORMAL WORK.

Anderson—Manual of Physical Training for Boys and Girls.
Bancroft—School Gymnastics.
Bowen—Teaching of Elementary School Gymnastics.
A Course in Physical Training for the Graded Schools of Michigan.
New York State Syllabus of Physical Training.

FOLK DANCING.

Burchenal—Dances of the People.
Folk Dances and Singing Games.
Crampton—The Folk Dance Book.
Crawford—Folk Dances and Games.
Hofer—Popular Games and Dances.

PLAY AND GAMES.

Angel—Play.
Bancroft—Games for the Playground, Home, School and Gymnasium.
Curtis—The Practical Conduct of Play.
Hofer—Children's Old and New Singing Games.
Johnson—Education by Plays and Games.

PLAYGROUND EQUIPMENT.

De Groot—Playground Equipment.
Hunt—Catalogue of Homemade Play Equipment.
Specifications for Homemade Apparatus, Am. Playground Association.
Manufactured playground apparatus obtained from Clanton and

Playground Equipment Valuable for Every School

Webb, Atlanta, and of Narragansett Machine Company, Providence, R. I.
Bancroft and Pulvermacher—Handbook of Athletic Games.
New York City Rules of the Public School Athletic League for Boys.
New York City Rules of the Public School Athletic League for Girls.
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MISCELLANEOUS.

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Rose—Feeding the Family.
First Aid—Metropolitan Life Insurance Company.

READING

By President M. M. Parks and Miss Euri Belle Bolton, Extension Worker, Georgia Normal and Industrial College.

Reading is the most important subject in the school curriculum, for ability to learn all other subjects depends upon ability to read rapidly and accurately.

Three essentials are necessary for the successful teaching of any subject:

1. A definite purpose for teaching the subject set forth in a specific aim.

2. A course of study outlining the subject-matter to be taught.

3. A successful method of presentation.

There are three stages in the development of ability to read:

1. The acquisition of a working knowledge of the mechanics of reading. The child should acquire this knowledge through his reading work in Grades I, II, and III.

2. The development of skill and fluency in reading through extensive oral and silent reading. This skill should be developed in Grades IV and V, and during this period the mechanics of reading should become automatic and unconscious.

3. Independent reading for information, appreciation, and enjoyment. The reading work of Grades VI and VII should be of this type.

The present discussion of Reading is based upon the facts stated above.

Grade I.

I. Aims:

1. To develop in the child, from the first, the ability to comprehend the meaning of sentences, phrases and words.

2. To train the child to express in a natural way the thought gained from the printed page.

3. To develop the ability to recognize simple words and phrases independently.

4. To lead the child into an appreciation of good literature.

II. General Outline of Work:

TYPE OF WORK.	SOURCES OF MATERIAL.
1. Oral Reading.	Sentences from blackboard. Prescribed text-books. Supplementary books.
2. Word Drills.	Lists prepared by teacher. Lists at beginning of reading lessons. (See discussion of Word Drills).
3. Phonic Drills.	Exercises in Practical Primer, in Practical First Reader, and in Riverside First Reader. Lists Prepared by teacher.
4. Memory Work.	
a. Mother Goose Rhymes	"The Real Mother Goose"
b. Poems	Practical First Reader—pps. 7, 59, 82, 111. Riverside First Reader—pps. 46, 76, 97.
5. Story-telling and Dramatization.	Supplementary list. Some of the simple stories found in the second grade readers.
6. Silent Reading.	Action Sentences from cards constructed by teacher. Guessing Games (See "A Method for Teaching Primary Reading." — McMurry. Sentences from text-books.

III. Suggestions and Methods.

Note.—The concrete illustrations of the presentation of the reading lesson are based upon the books adopted by the state. If the books were different, the underlying principles of the teaching would be the same, but the illustrations would be different.

DEVELOPMENT OF FIRST LESSON.

The teacher should remember that the little people to whom she is giving these first reading lessons are having their first school experience and are timid and self-conscious. Her first duty is to make them feel at ease. This can be done by having them play a game.

(I) First Step—Game to Precede First Reading Lesson.

1. Materials needed:
   Small flag for each child.
   Ten soldier caps made of paper.

2. Presentation.

CHILD'S PART.	TEACHER'S PART.
a. Children get in position.	a. Have children get in position for work.
b. Children tell thoughts about soldiers.	b. "How many of you have seen a soldier?" "Will each of you tell us one thing you know about a soldier?"
c. Children learn song.	c. "We are going to learn a song about ten little soldier boys. I will sing it for you and then you may sing it with me."

WORDS OF SONG.

"One little, two little, three little soldiers,
Four little, five little, six little soldiers,
Seven little, eight little, nine little soldiers,
Ten little soldier boys."

d. Children play they are soldiers and march.
Flag carried by boy at head of line.
As song is sung children march to front of room and stand.

As teacher counts, 'One, Two,' they turn and face the other way.
Children march back to their places.

d. "We are going to have ten little boys play they are soldiers and march as we sing the song."
Teacher selects first ten soldiers to play. Gives caps.
"When soldiers march one of them usually carries a flag," etc.
As the children march back, sing the song: "Ten little, nine little, eight little soldiers,
Seven little, six little, five little soldiers,
Four little, three little, two little soldiers,
One little soldier boy."

e. Children study flags at desk:
(a) Find colors.
(b) Find where the stars are.
(c) Find where the stripes are.

e. Teacher gives each child a small flag. "You may study the flag and find what colors are in it; find where the stars are," etc.

(II) Second Step—First Reading Lesson.

1. Aim: To introduce the child to sentences and words as symbols for thoughts and actions.

2. Materials needed for presentation of lesson:

Flags	Crayon and eraser
Pointer	Colored crayon

3. Outline of presentation:

CHILD'S PART.

TEACHER'S PART.

a. Children tell of things they have learned about the flag-colors, where stars are, etc.

a. "You may tell me the things you have learned about the flag."

b. Children act out the sentences as they are given by the teacher.

b. "We are going to play a game with our flags. I'll be the leader and tell you some things to do with your flags."
Teacher gives the following sentences:
Wave the flag.
Put the flag on the desk.
Find the red in the flag.
Find the stars in the flag.

c. Children recall sentences given.

c. Teacher writes first sentence on the board in large script. Then prints same sentence under it.

Children give first sentence.	"Who remembers what I told you to do first? Would you like to see the crayon say that? You did not know that the crayon could talk. We can see what it says, but we can not hear what it says. It has said 'Wave the flag' two ways. This is the way it says it in writing (show with pointer) and this is the way you will find it in books."
Children act out sentences individually.	"John, you may do what this sentence says do." (Teacher runs pointer under sentence).
d. Children point out sentences both in script and in print.	d. "You may show us where the crayon says 'Wave the flag,' Mary." Drill is continued until children can recognize all of sentences in script and in print.
e. Children discover the phrase the flag.	e. "Look at the first sentence carefully. Can anyone show me where the crayon says the flag? "I am going to underline it with this red crayon so that we can see it easily." Teacher writes the flag on the board several times and continues drill until children have learned phrase.

(III) Third Step—Second Reading Lesson.

1. Aim: To have children learn new phrases and to lead them to read sentences from slips of paper.

2. Materials needed for presentation of lesson:
Same as above.
Sentences written and printed on slips of paper.

3. Outline of presentation:

a. Review sentences given in previous lesson.

b. Lead to recognition of the following words and phrases: *wave; find; the desk; the stars; the red.* As phrases and words are found, write them in separate list with colored crayon. Opposite each word or phrase print the same word or phrase. Leave list on board for future drills.

c. Give slips to children and lead them to read the sentences on them. If a child has difficulty, find sentences on the board and help him to see that they are the same.

Note.—Two recitation periods may be necessary for the presentation of the subject-matter outlined in Step II, but all of the work outlined in Steps I, II, and III should be presented the first day.

PRELIMINARY BLACKBOARD WORK.

1. Teach all of the twenty-eight words and phrases on the first fourteen pages of the Practical Primer by means of similar exercises from the blackboard and from sentences on slips.

2. It will not be necessary to use action sentences in the development of all of the lessons.

3. Teach the articles *a, an* and *the* in connection with other words. Give drills on the pronunciation of such phrases as *a boy, a girl, an apple, an orange, the man, the tree.* If the articles are taught separately, the child will form the habit of giving as much emphasis to them in his reading as he does to the important words.

4. In the development of the preliminary lessons, it will be better not to use the exact sentences found in the primer.

5. As the work advances, give to each child at the beginning of the lesson a sheet of paper on which all of the sentences to be used in the lesson have been written and printed. Have all of the sentences read in review by one child.

6. As sentences are taught to the class, write them in large script on sheets of manila paper 24x36 inches. Print the same sentences on the opposite sides of the sheets, and put the sheets together in a chart to be used in rapid review work.

7. It is very important that, from the beginning, the child be taught both the written and the printed forms of the words and sentences. Thus the difficulty of transition from script to print, or vice versa, is eliminated.

8. For seat work give to each child an envelope with words written or printed on separate slips of paper. Let children put words together to build sentences.

PERCEPTION CARDS.

1. Get sheets of manila paper, 22x28 inches, at the printing office. Have these sheets cut into strips 4x22 inches for sentences; into cards 3½x7 inches for words, and into small cards, 3½x4 inches for simple and compound phonograms. Have cutting done at printing office.*

*These measurements were taken from the Wisconsin Course of Study.

2. Write sentence, word, or phonogram in large script with black crayola on one side of strip or card, and print the same sentence, word, or phonogram on the opposite side of strip or card.

A rubber printing outfit can be secured from Clanton & Webb, Rhodes Building, Atlanta, Ga., for about $2.50. Every school should have a printing outfit, but if it is not possible to purchase one, cut the printed words of uniform height from newspapers and magazines and paste them on the back of the cards.

3. No teacher should attempt to teach primary reading without perception cards. They are needed for silent reading exercises and for word and phonic drills.

BOOKS IN HANDS OF CHILDREN.

1. The subject-matter on the first fourteen pages of the Practical Primer should have been taught by the end of the second week.

2. If the preliminary blackboard work has been well done, the first reading from the book will be very easy. The rapid progress made by the children when they first began to read in the book gives a sense of joy and power that should be kept alive throughout all of their reading work.

3. Conversation and questions about the pictures and illustrations may supply a motive for reading the sentences. e. g. Practical Primer, pp. 34: "Whom do you see in the picture? What has the mother Will you read the sentence that tells what she has? To whom will she give the book? Will you read the sentence that tells you?" etc.

WORD DRILL.

1. Rapid word drills should be given daily.

2. Words on perception cards may be flashed before children for recognition. The child who calls word first may have card. The one who gets the most cards wins the game.

3. Make list of action words taught. e. g. run, jump, skip, sing. Leader (teacher at first) points to words and calls upon individuals to perform actions indicated.

4. Keep on blackboard list of words taught. Give pointers to two or three children. Let them race to find words as they are pronounced by the teacher.

5. Fishing. Let children (representing fish) stand in a circle and one child (representing the fisherman) stand in the center. Let each fish hold a word card and let the fisherman catch the fish he can name correctly.

Note.—These devices are merely suggestive. The resourceful teacher will think of many others and will constantly vary her drill work.

PHONICS.

1. Purpose:

(a) To develop in the child the power of independent recognition of new word-forms.

(b) To develop clear articulation, correct enunciation, and proper voice control.

Note.—The study of phonics is a means to an end and not an end in itself, and can be justified only as it contributes to the one main purpose, which purpose is *teaching children to read.*

2. Phases of work:

(a) Training the ear to recognize the sounds.

(b) Training the voice to make them.

(c) Training the eye to recognize the symbols which represent them.

3. Suggestions:

(a) Phonetic drills should not be given until after reading in the books is begun.

(b) Present the consonants first after the sight words from which they are analyzed have been taught. The consonants can be taught more easily if they are grouped and taught with phonograms.

(c) To teach consonants f, m, and r—pps. 15, 23, and 39, Practical Primer:

(1) Write the words fan, man, and ran on the board. Pronounce them slowly and distinctly until the children isolate the sounds f, m, and r. Then write the words on the board thus: f an, m an, r an. Pronounce the phonogram *an* and lead children to see that it is the same in each word.

(2) Call on the children to give the sounds individually until they learn them. Teacher should be careful that the correct sound is given each time.

(3) Write the phonogram *at* on the board and place phonogram cards in front of it to form the words fat, mat, and rat. Write the words f at, m at, r at, and give further drill. Later f and r may be added to the phonogram *un* to build the words fun and run. This last step is one of the most important in the teaching of phonics, for it helps the child to build up new words.

(d) In like manner the consonants t, b, and d, pps. 33 and 39, Practical Primer, may be grouped and taught with the phonograms an and at.

(e) After the phonograms an and un have been learned, the words fan and run may be further analyzed so that the consonant n is isolated.

(f) After the consonants have been learned, present the vowels given in the Practical First Reader.

(g) Do not emphasize the diacritical marks when presenting the vowel sounds. Diacritical marks should not be presented until the children are ready to begin to use the dictionary in the Fourth Grade. The children should be trained to recognize the different sounds of the letters from their association with other letters.

(h) Keep on the blackboard a list of all sight words, consonants, and vowels taught. This list will make it possible to give rapid drills often.

(i) Perception cards (see suggestions in regard to "Perception Cards") should be used both in the presentation and in the drill work in phonics.

(j) For further suggestions on the teaching of phonics see Summers Readers, Manual, by Maude Summers. Published by Frank D. Beatty & Co., New York. The Aldine Readers, A Manual for Teachers, by Spaulding & Bryce. Published by Newson & Co., New York.

MEMORY WORK.

1. Mother Goose Rhymes:

(a) Any person who has been deprived of the Mother Goose Rhymes in childhood has missed a part of his rightful heritage.

(b) The Mother Goose rhymes are especially suitable for memory work in the first grade because:

(1) Their rhythm appeals to the child.

(2) The rhymes are short and therefore easily learned.

(3) They abound in repetition and action.

(4) Their language is simple and within the child's comprehension.

(c) The rhymes can be given as memory work during the first two or three months of school. Later they can be used as sight reading exercises.

(d) The number of rhymes given will depend upon the acquaintance with Mother Goose the children have made at home. Each teacher will measure the needs of her class. See Supplementary List of Stories for suggestions.

2. Poems:

(a) One of the most important, but one of the most neglected, phases of reading and language work is the teaching of poems. While the child is young and it is easy for him to memorize, he should be given the opportunity of storing his mind with the treasures of literature.

(b) Method of presentation:

(1) Introduce the theme and setting of the selection by means of conversation, pictures, or a story.

(2) Read the selection as a whole to the class. (If possible, teacher should do this from memory.)

(3) Clarify images seen and facts told by means of questions and discussion. Let many of the questions be so worded as to elicit answers in direct words of the selection.

(4) As a result of the questions and discussion many of the members of the class will have memorized the selection. Let individuals reproduce it orally until a majority of the class know it. Study the selection in review until everyone knows it.

(c) Illustration: Teaching of "The Wind," by Rosetti.

Aim: To have children appreciate the beauty of the poem.
To have children memorize the poem.

CHILD'S PART.	TEACHER'S PART.
(1) Children give thoughts and observations about the wind.	(1) "How many of you heard the wind blow last night? What are some of the things the wind does when it blows? Would you like to hear a poem about the wind? Listen to the poem and see if you can find out what questions are asked and what answers are given to them."
(2) Children listen for the questions and answers in the poem.	(2) Teacher reads poem from memory. "Who has seen the wind? Neither I nor you, But when the leaves hang trembling, The wind is passing through. Who has seen the wind? Neither you nor I, But when the trees bow down their heads, The wind is passing by."
(3) Children see pictures in poem.	(3) "What is the first question asked? What answer is given? What is said about the leaves? What is meant by saying that 'the leaves hang trembling?' Can you show me how they tremble? What kind of wind makes the leaves tremble?
(If children do not notice rhyme, give explanation after poem is memorized).	"What is the next question asked? How is it answered this time? Who knows why this answer is different from the first answer? What is said about the trees? How can the trees bow down their heads? What kind of wind makes the trees bow down their heads? What might happen to them if they did not?"
(4) Children give poem orally until it is learned.	(4) "Now we are going to learn the poem. Who can give the first stanza? Who can give the second stanza? Who can give the whole poem? How does the wind sound when it blows hard? What word in the poem could be made to sound like that? When we say the poem this time let's make the who sound who-o-o has, etc. How many would like to tell this poem to your mothers tonight?" Interest can be added by having Children say poem in concert and act lines 'When the leaves hang trembling' and 'When the trees bow down their heads.'

STORY TELLING AND DRAMATIZATION.

Many of the stories to be read in the Second Grade should be told tc the First Grade, then retold by the children and dramatized. For method see discussion under Second Grade.

SILENT READING.

1. Ability to read orally or silently depends upon ability to get thought from the printed page. Therefore, from the beginning, the teaching of Reading should train the child to get the thought quickly and accurately.

2. Some exercises that will develop this ability in the First Grade are:

(a) Reading sentences in textbook. Let class, when signal is given by the teacher, open books and read sentence. When signal is given by teacher, let them close books. Call on someone to give the thought of the sentence read.

(b) Action sentences. e. g.:

Close the door.
Open the window.
Bring me your pencil.
Bring me your book.
Draw a circle on the board.

Teacher writes a sentence on the board and says, "John, you may do what this sentence says do."

John reads the sentence and performs the action indicated. The class makes no oral correction, but if John makes a mistake, someone else may raise his hand and perform the action, and so on.

The teacher may vary the exercise by flashing before the class cards upon which action sentences are written. Those who comprehend the direction may raise their hands and then someone may be called upon to perform the action. (Sentences for this drill should be very short at first. e. g. Get the ball. Close your eyes. Special drills should at times be provided for the slow members of the class.)

The children may conduct this exercise with cards during the study period. One child is appointed leader. He shows the cards to class and calls upon someone to perform the action indicated. If class is large, it should be divided into groups and a leader appointed for each group.

In order that these exercises may be varied from time to time, the teacher should have at least a hundred cards with action sentences on them. New sentences will be added to the list as new words are taught.

(c) Guessing games:

Teacher writes riddle on the board. The sentences that tell most plainly about the object should be written last. The pupils read sentences, and as they read try to guess the riddle. As soon as anyone can guess, he raises hand, but should read on to make sure.

Ex. Riddle to be guessed.

I can run.
I can skip.
I can jump.
I can hop.
I can stamp.
I can bow.
I can pat a cat.
I can pound.
I can fan.
I can rap on my desk.
I can tap on my desk.
I can not fly.
I can spin a top.
I can dust.
I can stand still.
I can sit down.
I can hum.
I can puff.
(Ans.: A boy or girl.)

Note.—The above riddle is taken from "A Method For Teaching Primary Reading"—McMurry. See this book for further suggestions about action sentences and guessing games. The book is published by the MacMillan Co., Atlanta.

GRADES II AND III.

I. Aims:

1. To increase the rate of reading and the ability to get the thought.
2. To develop the power of appreciation and oral expression.
3. To gain in independence of word recognition.

II. General Outline of Work:

TYPE OF WORK.	SOURCES OF MATERIAL.
1. Oral Reading.	Stories and selections in prescribed text-books. Supplementary readings.
2. Word and Phonic Drills. Syllabication and accent introduced.	Exercises in Phonics in Introduction to Practical Second Reader. Word lists at beginning of reading lessons. New words in supplementary readings.
3. Poems and Selections memorized.	Prescribed text-books. Supplementary readings.
4. Story-telling and Dramitization.	Suitable stories in prescribed texts. e.g. Biddie Widdie and Little Red Riding Hood — Practical Second Reader. Supplementary list.
5. Silent Reading.	Informational selections in prescribed texts, e. g. Stories of Columbus — Practical Second Reader. Simple stories read for the purpose of acquiring speed.

III. Suggestions and Methods:

Presentation of lesson in Oral Reading.

1. Have children pronounce words at beginning of selection and discuss their meaning. Have children use these words in original sentences. *The words at the beginning of a reading lesson are not to be spelled.* Review difficult words which have not been mastered.

2. By means of questions and discussion bring out the main facts in the selection. If the selection is a story, it might be well to discuss it under the following topics:

(a) Setting of story—where events of the story happened.

(b) The characters—who took part in the action of the story.

(c) What part each character played in the story.

Teacher should encourage children to ask questions about any paragraphs or passages they do not understand.

3. Children should next read the lesson. The teacher should help with pronunciation if necessary. *Members of the class should not be permitted to correct errors in pronunciation or emphasis.* Such a procedure directs the attention of the class to the mechanics of reading and thought-getting, which is the most important phase of reading, but is neglected.

4. Let the children tell story in their own words. If the story lends itself well, let the class dramatize it.

SUPPLYING A MOTIVE FOR THE RECITATION.

1. No class should be permitted to read just because it is time for the reading lesson.

2. The assignment should be made so that there is a definite purpose for each reading lesson. A story may be read so that it can be retold or dramatized, or so that it may be compared with another story. A selection may be read for information. e. g. The selection about Columbus in the Practical Second Reader may be read so that the class will learn who Columbus was and what he did.

STORY-TELLING AND DRAMATIZATION.

Two instances that have come under the writer's observation will show the need in the child's life for dramatization and how simply make-believe play is accomplished in his imagination.

I was sitting in a hotel parlor one day when two little girls, five and six years of age, came in with their paper dolls in boxes. They seated themselves about three feet apart and began to play.

The oldest little girl began, "I'll be Mrs. Hamilton and you can be Mrs. Anderson. I'll telephone you." She then rang central and called for Mrs. Anderson. Mrs. Anderson answered at once and this was the conversation:

"Is that you Mrs. Anderson?"

"Yes. Is that Mrs. Hamilton?"

"Can you come over and spend the day with me?"

"No; little Sarah is sick today and I can't come. You come over and spend the day with me."

"All right. I'll be over directly."

Ting-a-ling. The receivers were hung up. They then changed their positions without getting up, and little Mrs. Anderson said, "I'm so glad to see you. Come in. I am sewing today. Did you bring some sewing with you?"

The little girls then began to dress their paper dolls and to discuss their different dresses. After a short while, Mrs. Hamilton got up to leave and they went through with the usual procedure of leave-taking. The little girl walked away a few steps and then came back and they began to play something else. All of this drama of an adult's day was acted while the little girls were sitting within three feet of each other, and it was done with no equipment for making the action real other than two boxes of paper dolls.

One day I was visiting a first grade room. I asked the little people if they liked to play stories.

"I do," replied one little boy. "My mother brought me a new book about Robinson Crusoe the other day. After she read to me about him, I went into the room by myself and got me a stick for a gun and played that I was Robinson Crusoe."

1. Purposes of Story-telling and Dramatization:
   a. To give the child the joy to be found in literary possessions.
   b. The story is the best means of establishing a spirit of understanding and sympathy between teacher and pupils.
   c. The story is a means of developing the power of self-expression. The children gain in this power of expression by
      (1) Retelling the story in their own words.
      (2) Dramatizing the story.
      (3) Drawing pictures to illustrate the story.*

* For further discussion of story-telling see "Teaching Children to Read," Klapper—pp. 92.

The last mentioned form of expression is especially important in the Second Grade. The child who is too timid to summon courage enough to take part in a dramatization may take great delight in making a picture to show what he sees in a story. The drawings made by a second grade class will be very crude, for a child at this age can not make a finished drawing.

2. Steps in Dramatization:
   a. Story read in class by children or told by teacher.
   b. Story discussed. Children should get clear idea of
      (1) Setting
      (2) Characters
      (3) Part each character plays in story.
   c. Story told in whole or in part by children.
   d. Selection of children to take parts of different characters in story.

e. Selection of places in room for different scenes of story and arrangement of simple materials needed. Elaborate stage-settings and costumes are not necessary. A red middie tie, worn to school by one of the children, can be used for the hood in "Little Red Riding Hood;" a lunch basket or a box can serve for the basket; two chairs placed together or a short bench may serve as the bed in the grandmother's cottage; a coat will serve as the covering for the bed; a large handkerchief can be made into a cap for the grandmother; sticks will serve as axes for the woodcutters. In the imagination of the child this simple equipment is made real and enables him to live through the emotions and experiences of the characters in the story.

f. The last step in the dramatization is having the story played by the children. Freedom of interpretation and expression should be encouraged.

SILENT READING.

1. Suggestive exercises:

a. Let class read paragraph. Call upon some one to give the thought of what was read.

b. The above exercise may be varied by setting a time limit for the reading of paragraph, e.g., At signal from teacher members of class open books and begin reading. At the end of 20, 30, or 40 seconds, depending upon the length of the paragraph, the teacher gives signal for the books to be closed. Class gives thought of paragraph read.

c. Let class read a selection by paragraphs and write out the main idea of each paragraph.

d. Let some member of class read selection that is new to the class while other members of the class listen with closed books. In this exercise the reader realizes that his hearers know nothing of the content of the selection except what they gather from his reading and for this reason, giving the thought becomes his chief motive for reading.

e. Towards the latter part of the third year the class may read a short story and rewrite the whole story in their own words.

f. The teacher should continue to use devices for increasing the child's eye-span in reading. Such questions as "What fell on Biddie Widdie's head? How big were Troll's eyes? Why were the red people called Indians?" etc., may be written on cards and used in rapid drills in sentence reading. The cards should be held before the class for only a few seconds and the children should raise hands as soon as they are ready to answer.

GRADES IV AND V.

I. Aims.

1. To have children read an abundance of interesting material.
2. To increase the rate of silent reading.
3. To develop the ability to read with appreciation and expression.
4. To train the children to organize the thought gained from reading.

II. General Outline of Work:

TYPE OF WORK.	SOURCES OF MATERIAL.
1. Oral Reading (for expression and appreciation).	Prescribed text-books. Supplementary readings.
2. Memory Work.	Poems in prescribed texts. Poems in supplementary list.
3. Story-telling and Dramatization.	Appropriate stories in prescribed texts. Supplementary stories.
4. Silent Reading.	Informational selections in prescribed texts, History, geography, and nature stories. Arithmetic problems.

III. Suggestions and Methods.

USE OF DICTIONARY.

1. Work with the dictionary should be begun in the fourth grade.
2. Each pupil should have a small abridged edition.
3. Teacher should train pupils in its use.
4. The study of diacritical marks should be introduced here as an aid to the correct pronunciation of words found in the dictionary.
5. Often a word has several meanings given in the dictionary. Pupils should be trained to study the context relations of a word in reading and decide which of the meanings given is the one he desires.

ORAL READING.

1. In Grades IV and V the teacher should work to have pupils develop the ability to read with appreciation and expression.
2. The most dramatic parts of a story may be selected for expressive reading.
3. Pupils should sometimes be asked to select a favorite poem and read it to the class. If this privilege is conferred as a special honor upon those who have done their assigned work well, it will supply an additional motive for good reading. Pupil should read to class as audience.
4. As an aid to oral reading, articulation, enunciation, and pronunciation drills may be given apart from the regular reading lesson. Drills on the correct pronunciation of such difficult words as attempt, thousandth, mints, etc., will train the pupils in voice control. "Clear Speaking and Good Reading" by Arthur Burrell, Longmans, Green & Co., gives good exercises in vocal training.
5. The teacher should read stories and poems to all of the grades.

This reading to the class gives her an opportunity of setting the standard for good oral reading.

SUPPLEMENTARY READING.

1. As a result of the reading work in these grades, the mechanics of reading should become habitual. For this reason fourth and fifth grade pupils should read a large amount of material that is comparatively easy and compellingly interesting.
2. The reading of an abundance of subject-matter will develop the ability to read rapidly and accurately.
3. A sufficient supply of supplementary reading material for all of the grades is one of the greatest needs of our schools.
4. The teacher should make every effort to meet this need in her school by raising funds for the purchase of story books and supplementary readers.

SILENT READING.

1. Suggestive exercises:
   a. Let children read a paragraph and express the thought in a single sentence.
   b. Assign a story to two or three members of the class. Let them divide the story into parts and read it to the class.
   c. Assign history, geography, and nature study stories. Let pupils read them at home and report on them in class.
   d. Teacher may read a part of a story to the class and let those who are interested finish the reading for themselves.
   e. Write a number of questions on the board. Let pupils read selection silently to find answers to the questions.

GRADES VI AND VII.

I. Aims:
1. To have pupils read independently for information.
2. To have pupils develop ability to organize thoughts gained from reading.
3. To have pupils continue to develop their ability to read well orally.

II. General Outline of Work:

TYPE OF WORK.	SOURCES OF MATERIAL.
1. Silent Reading for information and speed.	Prescribed texts. Topics in History, Geography, and Agriculture. Rules for Volley Ball, Basket Ball and other games. Supplementary readings.
2. Oral Reading.	Prescribed text-books. Supplementary readings.

3. Memory Work.	Poems and selections in prescribed texts and in supplementary readings.
4. Story-telling and Dramatization.	Quotations from masterpieces taught. Appropriate stories in prescribed text-books. Supplementary stories.

III. Suggestions and Methods.

SILENT READING

1. Suggestive steps in lesson in Silent Reading:
   a. Place on board an outline of selection to be read and let this outline the silent reading during the study period. Or place on the board a list of questions based on the paragraphs of the selection to be read.
   b. At the beginning of the recitation let class give summary of information relating to each topic in the outline. Or if questions have been listed, let them give answers to questions. It is not necessary to read the selection orally, but if there is doubt or difference of opinion about a statement, let pupils refer to book. Class should discuss topics freely.
   c. Assign new questions or a new outline for the study of the next lesson. Problems should be set up in the assignment.
2. Exercises:
   a. See suggestions for lower grades.
   b. After reading a selection let class suggest title indicative of content.
   c. Let each pupil prepare a set of questions on a silent reading assignment. Let the class discuss and answer questions.
   d. Correlate the work in History, Geography, and Agriculture with readings, e.g., Assign a separate topic to each member of the class. Hold each pupil responsible for his topic only. Encourage class to do as much reference reading as possible and have them prepare an outline for their discussion in class. This exercise not only calls for a maximum amount of thought-getting in reading, but it gives the child training in organizing the information gained from reading and leads to the formation of correct habits of study.
   e. For rapid reading:
      (1) Let class turn to passage in newspaper, magazine, or book.
      (2) At signal from teacher books are closed.
      (3) At signal from teacher books are closed.
      (4) Have class write digest of facts.
      Note: The time limit set for this exercise will depend upon the length of the selection.
   f. Have pupils report in class on books and stories read at home.

REMARKS.

1. Silent reading for information and speed should have most emphasis in Grades VI and VII.
2. Work in oral reading should continue in these grades and emphasis should be put on interpretation and expression.
3. The work in story-telling and dramatization should continue. Good results will be secured if pupils in the seventh grade are permitted to tell stories to the primary grades.
4. The teaching of the masterpieces in these grades offers the teacher an excellent opportunity to develop a love for good literature.

MEASURING ABILITY IN READING.

1. The standardized reading tests make it possible for the teacher to diagnose her class and individual pupil difficulties. After she has given a reading test to her class and sees what the difficulties are she can work intelligently to overcome them.
2. Some of the most widely used tests are:
   a. The Monroe Silent Reading Test
      Test I for grades III, IV, and V.
      Test II for grades VI, VII, and VIII
      Test III for grades IX, X, XI, and XII.
      Published by The Public-School Publishing Co., Bloomington, Ill.
   b. Improved Scale for Measuring the Understanding of Sentences: Scale Alpha 2, parts 1 and 2, by E. L. Thorndike.
   c. Improved Scales for Word Knowledge or Visual Vocabulary, by E. L. Thorndike.
      Tests mentioned in b and c may be secured from Teachers College, Columbia University, New York City.

LIST OF SUPPLEMENTARY STORIES AND POEMS.

Many of the stories and poems in the prescribed text-books are appropriate to certain seasons and are much more effective if given at this time of year, e.g., The stories of Columbus and those about the Indians given in the last part of the Practical Second Reader should be taught in October and not in January or February as they will be if the selections are taught in the order in which they come in the text-book.

This list of stories and poems for supplementary work is suggestive and is given in the hope that it will be helpful to the teacher who wishes to make her reading work a source of joy and inspiration and power to her pupils. Do not be discouraged if you cannot use all of this material. Each teacher will of course use all these aids that may be available.

GRADE I

September

1. MOTHER GOOSE: Humpty Dumpty. Sing a song of sixpence. This is the way we wash our clothes. Jack be Nimble. Come away and play.—"The Real Mother Goose."
2. STORIES: The Old Woman and Her Pig. The Gingerbread Man.—How to Tell Stories.—Bryant.
3. POEMS: My Shadow, by Stevenson.—Gold Nuggets of Literature.

October.

1. MOTHER GOOSE: Old King Cole. One two, buckle my shoe. Little Miss Muffett. Old Mother Hubbard. Hey, Diddle, Diddle. This little pig went to market. Ding dong bell, Pussy's in the Well.
2. STORIES: Story of Columbus' Boyhood—Practical Second Reader. The Little Red Hen.—Riverside First Reader.
3. POEMS: The Halloween Elf.—J. B. Tabb. The Haleburton.—Second Reader. Sleep and Rest, Tennyson.—Riverside First Reader.

November.

1. MOTHER GOOSE: Little Boy Blue. Little Bo Peep. Mistress Mary, Quite Contrary. Simple Simon. Hickory Dickory Dock.
2. STORIES: The Story of the Pilgrims. The Story of the First Thanksgiving.—The Story Hour, Wiggin.
3. POEMS: Thanksgiving, by Lydia M. Childs.—Gold Nuggets.

December.

1. MOTHER GOOSE: Little Jack Horner. Pat a Cake. Bye, Baby Bunting. Baa, Baa, black sheep. Hushabye baby on the treetop.
2. STORIES: St. Christopher.—Christ Tales, Hofer. The Story of the First Christmas.—The Story Hour, Wiggin. The Three Pigs.—How to Tell Stories, Bryant.
3. POEMS: Hang up the Baby's Stocking. Away in a Manger.—(Luther's Hymn).

January.

1. MOTHER GOOSE: Review of rhymes taught.
2. STORIES: Hare and the Tortoise.—Fairy Stories and Fables, Baldwin. Goldilocks and the Three Bears.—Best Stories to Tell to Children, Bryant. Three Billy Goats Gruff.—Practical Second Reader.
3. POEMS: The Swing, by Stevenson.—Riverside First Reader.

February.

1. STORIES: Washington and the Cherry Tree.—The Story Hour, Wiggin. Cinderella.—Grimm's Fairy Stories. Snow White and Rose Red.—Grimm's Fairy Stories.
2. POEMS: The Rain, Stevenson.—Gold Nuggets. Time to Rise, Stevenson. —Gold Nuggets.

March.

1. STORIES: The Lion and the Mouse.—Fairy Stories and Fables, Baldwin. Epaminondas.—Riverside Second Reader.
2. POEMS: The Wind, Rosetti.—Gold Nuggets.

April.

1. STORIES: The Story of Easter and The Rabbit and the Easter Egg.—Haliburton Second Reader. Little Riding Hood. — Practical Second Reader.
2. POEMS: The Rain Song, Loveman. The Friendly Cow, Stevenson.—Gold Nuggets.

May.

1. STORIES: Sleeping Beauty.—Riverside Third Reader. Raggylug.—Best Stories to Tell to Children, Bryant.
2. POEMS: The Dandelion.—Gold Nuggets. Sweet and Low, Tennyson.—Gold Nuggets.

GRADE II.

September.

1. STORIES: Selections from Hiawatha's Childhood.—Riverside Third Reader. Diamonds and Toads.—Grimm's Fairy Tales. The Dog and His Shadow.—Fables and Folk Stories, Scudder.
2. POEMS: The Wind and the Leaves, Cooper.—Gold Nuggets. Little Raindrops, Colton.—Gold Nuggets.

October.

1. STORIES: Story of Columbus. The Little Jackal and the Alligator.—Riverside Second Reader. The Dog in the Manger.—Fables and Folk Tales, Scudder. Beauty and the Beast.—Grimm's Fairy Tales.
2. POEMS: The Boy and the Sheep, Jane Taylor.—Gold Nuggets. Dutch Lullaby, Eugene Field.—Riverside Third Reader.

November.

1. STORIES: The Shoemaker and the Elves.—Riverside Third Reader. The Story of the First Thanksgiving.—Story Hour, Wiggin. The Boy who cried Wolf.—Fables and Folk Stories, Scudder.
2. POEMS: How the Leaves Came Down.—Gold Nuggets. Farewell to the Farm, Stevenson.—Gold Nuggets.

December.

1. STORIES: The Father and His Seven Sons.—Fables and Folk Stories, Scudder. The Mother of a King; The boy in the Temple, and The Carolers.—Christ Tales, Hofer.
2. POEMS: Christmas Carol, Longfellow.—Gold Nuggets. A Real Santa Claus.—Riverside Third Reader.

January.

1. STORIES: Rumpelstiltskin.—Grimm's Fairy Tales. The Crow and the Pitcher.—Fairy Stories and Fables, Baldwin.
2. POEMS: The Land of Story Books, Stevenson.—Riverside Third Reader.

February.

1. STORIES: The Ugly Duckling.—Andersen's Fairy Tales. The Cat and the Parrot.—Best Stories to Tell to Children, Bryant. Story of Washington and the Horse. Stories of Lincoln as a young man.
2. POEMS: Fiddle, Diddle, Dee.—Riverside Second Reader.

March.

1. STORIES: The Leak in the Dyke.—Best Stories to Tell to Children, Bryant. The Ant and the Grasshopper and The Goose that laid the Golden Egg.—Fairy Stories and Fables, Baldwin.
2. POEMS: The Wind, Stevenson.—Gold Nuggets.

April.

1. STORIES: Little Pink Rosebud.—Best Stories to Tell to Children. The Man, the Boy, and the Donkey.—Fairy Stories and Fables, Baldwin.
2. POEMS: April.—Gold Nuggets. The Wonderful World.

May.

1. STORIES: The Lark and Her Young Ones.—Stories to Tell to Children. Bryant. Raggylug.—Best Stories to Tell to Children, Bryant.
2. POEMS: The Song of the Thrush.—Gold Nuggets. Grasshopper Green.—Riverside Second Reader.

GRADE III.

September.

1. STORIES: The Hare and the Hedgehog.—Riverside Third Reader. Little One Eyes, Two Eyes, Three Eyes.—Grimm's Fairy Tales.
2. POEMS: September, Helen H. Jackson.—Gold Nuggets. Boy's Song, Whittier.

October.

1. STORIES: Life of James Whitcomb Riley. The Monkey, the Cat, and the Chestnuts.—Fairy Stories and Fables, Baldwin.
2. POEMS: Where Go the Boats, Stevenson.—Riverside Third Reader. The Raggedy Man, Riley. The Corn Song, Whittier.

November.

1. STORIES: The Cat That Walked by Himself.—Jungle Book, Kipling. Getting Ready for Thanksgiving.—The Haliburton Second Reader. (This selection is especially good for an exercise in Silent Reading for information.)
2. POEMS: Little Orphant Annie, Riley.—Gold Nuggets. A Thanksgiving Psalm.—Riverside Third Reader.

December.

1. STORIES: Golden Cobwebs.—How to Tell Stories, Bryant. The Story of the Three Wise Men.—Adapted from Bible. Story of the Fir Tree.—Hans Andersen's Fairy Stories.
2. POEMS: Christmas Everywhere, Brooks.—Gold Nuggets. December.—Riverside Fourth Reader.

January.

1. STORIES: The Twelve Months, A Slov Tale.—Riverside Third Reader. How Rikki-Tikki saved Teddy.—Jungle Book, Kipling.

2. POEMS: Psalm XXIII.—Bible. The New Year, Zetterbery.—Gold Nuggets.

February.

1. STORIES: The Fox in the Well, Aesop.—Riverside Third Reader. Review stories of Washington's and Loncoln's boyhood.—Riverside Third Reader. Little Daylight.—How to Tell Stories, Bryant.

2. POEMS: The Snowflakes, Sherman.—Gold Nuggets. The Song of Our Flag.—Riverside Third Reader.

March.

1. STORIES: Hans, Who Made the Princess Laugh. — Riverside Third Reader. Pied Piper of Hamlin.—Best Stories to Tell to Children, Bryant.

2. POEMS: A Winter Song, E. H. Miller.—Gold Nuggets. My Lady Wind. —Riverside Third Reader.

April.

1. STORIES: The Loviiest Rose in the World.—Hans Andersen Fairy Stories. The Constant Tin Soldier.—Riverside Fourth Reader.

2. POEMS: The Runaways, K. L. Brown.—Gold Nuggets. All Things Beautiful.—Riverside Third Reader.

May.

1. STORIES: Why Peter Rabbit Wears a White Spot.—Tell Me Another Story, Bailey. The Little Hero of Harlem.—Best Stories to Tell to Children, Bryant. Let children tell and dramatize those liked best.

2 .POEMS: The Rainbow Fairies.—Gold Nuggets. Where Go the Boats, Stevenson.—Riverside Third Reader.

GRADE IV.

September.

Polyphemus and Ulysses and the Bag of Winds.—Adventures of Ulysses, Lamb.

2. POEMS: Goldenrod.—Riverside Fourth Reader. September, H. H. Jackson.—Gold Nuggets.

October.

1. STORIES: An Adventure of Tom, the Chimney Sweep.—Riverside Fourth Reader. Story of Perseus.—Old Greek Stories, Baldwin. Stories from Georgia History.

2. POEMS: October's Bright Blue Weather, H. H. Jackson.—Gold Nuggets. Bob White, Geo. Cooper.—Riverside Fourth Reader.

November.

1. STORIES: The Wooden Horse.—Riverside Sixth Reader. The Corn Story.—Riverside Third Reader.
2. POEMS: Thanksgiving Hymn.—Riverside Fourth Reader.

December.

1. STORIES: Jason and the Golden Fleece.—Old Greek Stories, Baldwin. Selections from Christ Tales, Hofer.
2. POEMS: A visit from St. Nicholas, C. Moore.—Gold Nuggets. Kriss Kringle.—Riverside Fourth Reader.

January.

1. STORIES: Aladdin. — Arabian Nights. Sinbad, the Sailor.—Arabian Nights. Story of Nancy Hart.—First Lessons in Georgia History.
2. POEMS: Jack Frost.—Gold Nuggets. The Village Blacksmith.—Riverside Fourth Reader.

February.

1. STORIES: Billy Beg and His Bull.—Best Stories to Tell to Children, Bryant. History of Ali Babi and the Forty Robbers.—Arabian Nights. History Stories used for Silent Reading exercises.
2. POEMS: The Flag in Nature, S. F. Smith.—Gold Nuggets. Escape at Bedtime, R. S. Stevenson.—Riverside Fourth Reader.

March.

1. STORIES: Robinson Crusoe (in short form). The Arab and His Camel. —Riverside Fourth Reader.
2. POEMS: The Daffodils, Wordsworth. March, Wordsworth.—Riverside Fourth Reader.

April.

1. STORIES: The Elephant's Child.—Just So Stories, Kipling. Margaret of New Orleans.—How to Tell Stories, Bryant. The Nightingale.—Best Stories to Tell to Children, Bryant.
2. POEMS: Perserverance, Celia Thaxter.—Riverside Fourth Reader. The Violet, Jane Taylor.—Gold Nuggets.

May.

1. STORIES: David and Goliath.—Best Stories to Tell to Children, Bryant. How the Water Lilly Came.—Wigwam Stories, Judd.
2. POEMS: The Arrow and the Song. Longfellow.—Riverside Fourth Reader

GRADE V.

Stories.

How Thor got his Hammer.—In the Days of Giants, Brown.
The Punishment of Loki.—In the Days of Giants, Brown.
Prometheus.—Old Greek Stories, Baldwin.
Merchant of Venice.—Tales from Shakespeare, Lamb.
Robin Hood Stories.—Riverside Fifth Reader.

King of the Golden River, Ruskin.
Gulliver's Travels, Jonathan Swift.
Two Little Confederates, Page.

Poems.

Columbus, Joaquin Miller.—The Riverside Seventh Reader.
The Landing of the Pilgrims Hemans.—Gold Nuggets.
To The Fringed Gentian, William Cullen Bryant.—Gold Nuggets.
The Corn Song, Whittier.—Gold Nuggets.
Sky-Born Music, Ralph W. Emerson.
The One-Hundredth Psalm.—Bible.
Christmas Bells, Longfellow.
Planting of the Apple Tree.—Riverside Fifth Reader.
Evening on the Farm.—Riverside Fifth Reader.

GRADE VI.

Stories.

Stories of King Arthur.—Riverside Sixth Reader.
Merchant of Venice.—Tales from Shakespeare, Lamb.
The Story of the Trojan War.—Riverside Sixth Reader.
Swiss Family Robinson, Swift.
Boys of Other Countries, Taylor.
The Spy, Cooper.
The Other Wise Man.—Van Dyke.

Poems.

Snowbound, Whittier.—Riverside Sixth Reader.
See selections in Gold Nuggets—Book III.

GRADE VII.

Stories.

Last of the Mohicans, Cooper.
Selections from Treasure Island, Stevenson.—Riverside Seventh Reader
The Tempest.—Riverside Seventh Reader.
Christmas Carol, Dickens.
See list of Reading Books for the Grades.

Poems.

Courtship of Miles Standish, Longfellow.
Evangeline, Longfellow.
To a Waterfowl, Bryant.—Riverside Seventh Reader.
Give us Men, Jas. G. Holland.
Sir Galahad, Tennyson.
Chambered Nautilus.—Riverside Seventh Reader.
Selections from Gold Nuggets.

LIST OF SUPPLEMENTARY STORIES AND POEMS

FIRST GRADE.

Stories.

1. The Gingerbread Man.—Riverside First Reader.
2. The Story of the First Christmas.—The Story Hour, Wiggin.
3. Epaminoudas.—Riverside Second Reader.

4. Little Black Sambo.—Published by F. A. Stokes Co. (Can be purchased at most any book store for 35 cents.)

Poems.

1. My Shadow, Stevenson.—Gold Nuggets of Literature.
2. Sleep and Rest, Tennyson.—Riverside First Reader.
3. The Friendly Cow, Stevenson.—Gold Nuggets.
4. Mother Goose Rhymes.—"The Real Mother Goose."

SECOND GRADE.

Stories.

1. The Sleeping Princess.—Riverside Third Reader.
2. The Shoemaker and the Elves.—Riverside Third Reader.
3. Rumpelstillkin.—Grimm's Fairy Tales.
4. The Little Pink Rosebud.—Best Stories to Tell to Children, Bryant

Poems.

1. Dutch Lullaby, Field.—Riverside Third Reader.
2. Fiddle, Diddle, Dee.—Riverside Second Reader.
3. A Real Santa Claus.—Riverside Third Reader.
4. Grasshopper Green.—Riverside Second Reader.

THIRD GRADE.

Stories.

1. The Hare and the Hedgehog.—Riverside Third Reader.
2. How Rikki-Tikki Saved Teddy.—Jungle Book, Kipling.
3. Golden Cobwebs.—How to Tell Stories, Bryant.
4. Hans, who made the Princess Laugh.—Riverside Third Reader

Poems.

1. September, Helen Hunt Jackson.—Gold Nuggets.
2. Where go the Boats, Stevenson.—Riverside Third Reader.
3. Christmas Everywhere, Brooks.—Gold Nuggets.
4. Psalm XXIII.—Bible.

FOURTH GRADE.

Stories.

1. An Adventure of Tom, the Chimney Sweep.—Riverside Fourth Reader
2. Selections from Arabian Nights.
3. Billy Beg and His Bull.—Best Stories to Tell to Children, Bryant.
4. The Elephant's Child.—Just So Stories, Kipling.

Poems.

1. Thanksgiving Hymn.—Riverside Fourth Reader.
2. Kriss Kringle.—Riverside Fourth Reader.
3. The Village Blacksmith.—Riverside Fourth Reader.
4. The Violet, Jane Taylor.—Gold Nuggets.

For Grades V, VI, and VII, see original list.

SPELLING

BY SUPERVISOR M. L. DUGGAN AND MISS JANIE P. DUGGAN.

INTRODUCTION:

I. *Definition*: A good speller is one who spells ordinary words in common use correctly, with minimum attention on the spelling.

II. *Content*: The content of spelling, like the content of all school subjects, should be in close relationship with the vital interests of life and of the child.

A. *Sources* of words for spelling are:

1. *Pupils own vocabulary.* The spelling of words used by the child should be known.

2. *Words in ordinary use in life.* These will probably become a part of the pupil's vocabulary.

3. *Ayres and Jones lists.* Ayres list is a list of foundation words, carefully selected and graded according to difficulty. Jones list is a selected list of "one hundred demons of the English Language," or words found mis-spelled most frequently in children's compositions.

4. *Words selected from reader and speller.* The words should be carefully selected as adapted to pupils of a given state of development.

5. *Mis-spelled words in written work of pupils.* This is the most vital source of content for spelling, and here the motive is inherent. Each pupil should be required to keep a list of all the words mis-spelled in his written work. The teacher should have a duplicate list.

B. *Omissions.* Many words formerly held important as inclusions in a speller or a spelling list should be entirely omitted. In this class are highly technical words, unimportant geographical names, many names in history, literature, etc. Words of this type may be written on blackboard by the teacher when a need for them arises, or in the upper grades may be looked for in dictionary.

III. *Amount of time given to spelling.*—Fifteen minutes a day for five days in the week is usually considered a sufficient amount of time in which to get desired results in spelling. More than this often means waste.

IV. *Amount of assignment*—The number of *new words per lesson* should not exceed three in the first three grades. Two or three *review words* should be added. The number of *new words* for remaining grades should not exceed five or six.

V. *Method*—The aim of the teacher should be to "show pupils how to apply thinking to the mastery of words. Her task is to point out to the pupils *what there is to think about in a word* and to show them how to think about it before attempting to memorize." The chief points to be emphasized are *pronunciation, meaning, use, spelling.*

Method may be considered from the standpoint of

A. The assignment
B. The study
C. The recitation.

A. The assignment should always receive the closest attention of both teacher and pupils. The following procedure is suggestive:
   1. The teacher may write the word on the board, prououncing it distinctly while writing it.
   2. The teacher may then develop the meaning of the word orally with the class by giving definition and calling for a sentence using the word.
   3. The teacher may divide the word into syllables calling on pupils to spell it by syllables.
   4. The teacher should next call attention to any difficult part of word; for example, (1) in *relief, ie* is the difficult part; (2) in *separate,* the *a* forms the difficulty.
   5. The teacher should also call attention to the parts already known.
   6. The pupils should then write the word on paper, saying it as they write it.
   7. Pupils may spell the word orally, with closed eyes, and pronounce.

   As progression is made through the grades, some of these steps may be combined.

B. When *pronunciation, meaning* and *use* of word are known, pupils are ready to *study its spelling.* In study, the pupil should form the habit of discriminating between difficult and easy words in a list, and concentrate on the former.

The study lessons may very often and with profit immediately follow the assignment. This is especially advisable in the primary grades.

Recognizing that correct spelling is mainly a result of memory, the pupil should, *with conscious attention* mechanize the spelling of the word. This is done through the appeals to the eye, the ear, and the motor coordinations.

Train the eye.....to see clearly
Train the ear.....to hear accurately
Train the voice.....to enunciate distinctly
Train the hand.....to reproduce readily.

C. The recitation proper consists in testing the pupil's ability to spell the word assigned and studied. Both oral and written testing are desirable; however the pupil's ability to spell given words is actually tested when the word is used and correctly spelled in *spontaneous and in dictated written work.*

In checking up the work of the recitation it is found that errors may be due to

1. *Omissions*—as rembrance for rem*em*brance, or raing for rai*n*ing.
2. *Substitutions*—as t for d in "heredity.'
3. *Redundancy* (letters added)—as nail*e*s for nails; whitch for which, etc.

The teacher should diagnose the special difficulties of individual pupils, and thus conserve effort. All errors may be traced to one of two types: either (1) there is definite *formation of a wrong bond or habit,* as when the pupil invariably spells a certain word in the same incorrect way; or (2) there is a failure to form any definite bond whatever, as when the word is *mis-spelled in various ways,* the pupil not adhering to one particular spelling.

It is valuable for the child to often check his own work, rather than exchange with a fellow pupil, for in this way he may *consciously* correct his own errors.

If words are learned so well that they can be correctly spelled for five successive days, they may be considered as mastered, provided occasional general reviews are given.

Overlearning or study of words already known is a great waste of effort and time.

To summarize the method of learning to spell a word:

1. See it.
2. Hear it.
3. Say it.
4. Read it.
5. Spell it orally.
6. Copy it.
7. Write it.

No one method of presentation is always best.

VI. *Motivation.* The following suggestions for motivation may prove valuable:

A. Let the teacher enlist *pupil cooperation* in selection of words for study, and in determining parts of words that require especial attention.

B. "Competition appeals to a universal human interest."

Two forms of competition are suggested:

1. The pupil may compete with others of his class.

2. Far more valuable is the competition which involves *beating one's own* record. By keeping his own score from day to day the pupil is stimulated to strive constantly for self-improvement.

C. When the content or subject matter of the spelling lesson consists of words taken from individual written work of pupils, interest in the correct spelling of the words is inherent. Here the pupil actually sees his own need, hence motivation is assured.

VII. *Measurement in Spelling.* Spelling scales have been constructed for measurement in spelling, but only the *ability to spell the words given* is measured. From the standpoint of one definition "a good speller is one who spells correctly words in common use with minimum attention on spelling," the first task of measurement is to determine what are the "ordinary words in common use" and then grade these words in the order of difficulty. Measuring scales that have been constructed are:

1. *Ayres Measuring Scale for Ability in Spelling.* (Copies may be purchased from the Division of Education, Russell Sage Foundation, New York City.)
2. *Buckingham Spelling Scale.* (Obtained from Bureau of Publications, Teachers College, Columbia University, New York City) Teachers College Contributions to Education No. 59.
3. *Courtis's Standard Research Tests in Spelling.* (Obtained from S. A. Courtis, 82 Elliott Street, Detroit, Michigan.)
4. *Starch's Spelling Tests.* (Daniel Starch, Madison, Wisconsin.)

VIII. *Use of Dictionary.* By the end of the elementary school pupils should be able to

1. Find a word in the dictionary quickly.
2. Understand accent and syllabication signs.
3. Discover derivation of words from English equivalents of foreign words.
4. Pick out the meaning that fits a given content.
5. Find pronouncing key. L

BEGINNERS

1. Train the ear by pronouncing *distinctly* initial consonants, as *m*-an; *m*-at; *m*-ama, *etc.* Give many words beginning with same and similar sounds. Prolong with emphasis the initial consonant.

2 Train the voice to reproduce by having children pronounce same words with similar emphasis on the initial consonants, individually and in concert.

3. Train the eye by writing same words for developing ready recognition of symbols.

4. Train for motor coordination by having children reproduce symbols in writing, at the same time giving their sounds.

Drill as above several times daily.

1. Teach the *at* family; *c*-at; *b*-at; *f*-at; *m*-at; *s*-at, *etc.*, similarly as above.

2. Have the children *point out* and sound the phonograms.

3. Associate sound of phonogram with written symbols.

4. Have children underline *at* (phonogram) in the words.

5. Let children help build words containing the phonogram.

6. Let children help construct a chart with words so built.

1. Teach new words. First teach only words that are spelled phonetically.

2. Show that such words "spell themselves when correctly and *distinctly* pronounced."

Examples: Poem, many, separate, etc.

3. Be careful that all children get correct first impressions as to pronunciation, meaning, and spelling. Let them *hear, say,* and *see* all new words before attempting to spell them.

4. Oftentimes devices for fixing the order of letters in the memory may be resorted to profitably. Examples: "*Many* has a *man* in it." Let them find the *man*. "*Many* is a word *many* people misspell." Have them write the sentence.

TESTINGS..Only after words have been thoroughly taught and learned should there be *testing* in the primary grades.

NOTE: It is not deemed necessary to give more details as to spelling in the primary grades because of the fact that spelling should be taught in connection with *reading* in these grades. Phonics and diacritics will be treated under the subject of Reading.

In Upper Grades.

(a) Assignment; (b) independent study; (c) testing, should characterize every spelling lesson in the elementary grades. Too little attention is usually given to the assignment. Here, often, is the best opportunity for the teacher to teach. "Prevention is better than cure." In the assignment the teacher will have opportunity to anticipate and obviate difficulties that might arise in independent study. Generally one-third of the period may profitably be devoted to the assignment of the next lesson. Give correct first impressions by careful pronunciations. Discuss meanings and uses of the words, sometimes derivations and history, call attention to any special characteristics of particular words, challenge pupils' thinking powers in the study of the lesson. Supervise independent study of lesson by imposing short time limitation, thereby stimulating concentration. Encourage free use of the dictionary by pupils. Study non-phonetic words in the way best suited to the individual type of imagery, by visualization, by writing, by repeating the letters in their proper order, or in combinations of two or more ways. Apply rules and devices—the "seed" words: succeed, exceed, proceed, supersede, may be easily learned when it is remembered that *all* the others are spelled *cede*.

Very little time need be taken up in *testing* apart from the ordinary

written work of the school. Occasionally dictation is good for the purpose of testing the ability to spell common words "with minimum attention on the spelling," but when indulged in too often is a waste of time because of the recurrence of these common words. Immediate correction of their own errors in written spelling cannot be urged too strongly. It is often well to call attention to the *number* of errors and let pupil find them.

Suggestions For a Spelling Lesson in Fourth Grade.

The class may take up, as an oral English lesson, a study of the present work of the Red Cross since the war is over, or what the Red Cross does in time of peace. A short time before Armistice Day is a psychological time for such a lesson. The teacher develops with the class the many kinds of work taken up by the Red Cross, such as aid given in cases of flood, famine, fire, sickness, epidemics, etc. All of these are types of service included in one expression, viz: *relief*. For an assignment in spelling, following the English lesson possibly, these words, the meaning of which have already been developed, are written on the board and pronounced, and difficult parts noted, etc., f*oo*d, rel*ie*f, fam*i*ne, p*ea*ce. When the time comes for a written English lesson on the above topic, these words have already been mastered by every pupil. (Call attention to the rule that "when in doubt, as to whether the *i* or the *e* comes first in such words as rel*ie*f, rec*ei*ve, bel*ie*ve, *etc.,* remember that "i precedes e, except after c, or when sounded as *a,* as in neighbor or weigh."

Synonyms and antonyms should be developed in oral and written English work, thus affording variety of expression and enlarging pupils' vocabulary. In teaching the spelling of homonyms it is best to develop one of a set first, as to meaning and spelling. When the one is firmly fixed, then in a *subsequent* lesson the second one of the set may be developed, and comparisons made between the two. For example: princi*pal*—princi*ple*. First develop with the pupils *principal* with all of its meaning, etc. This tends to prevent confusion of the two in the mind of the pupil.

Principles For Selection and Organization of Spelling and Words Studies.
—Bonser.

1. The selection of words to be studied should be based wholly upon needs which are revealed by written work and by problems in the recognition and pronunciation of words in reading.

2. Those words only which are misspelled should appear in spelling lists made up from day to day. These words should be taught by definite attention to their respective difficulties and practice given in writing them until they are learned. Reviews from time to time should be provided to prevent lapses for words not written with much frequency, or words offering special difficulties.

3. When sufficient capacity is developed, children should be definitely

instructed in the most rapid and efficient methods of using the dictionary for both pronunciation and meaning.

4. As a part of the study of content in every subject, as occasion offers, attention should be called to the exact use of words in expressing meanings of the root significance of parts of derivative words as a help in getting meanings, of the uses of synonyms and antonyms for variety of expression, of the origin of particular words as these are found in their setting in history, literature, geography, or the practical arts, and of all other situations which may serve to develop interest in words as representing ideas and to make children increasingly intelligent in their use.

Measuring Scale for Ability in Spelling

(Reprinted here by the courtesy of Dr. Leonard P. Ayres, Director Russell Sage Foundation, Division of Education.)

	A	B	C	D	E	F
Grade II	99	98	96	94	92	88
Grade III			100	99	98	96
Grade IV						100
	me	and	a	the	he	of
	do	go	it	in	you	be
		at	is	so	will	but
		on	she	no	we	this
			can	now	an	all
			see	man	my	your
			run	ten	up	out
				bed	last	time
				top	not	may
					us	into
					am	him
					good	today
					little	look
					ago	did
					old	like
					bad	six
					red	boy
						book

Use of the Scale Explained

The numbers at the top of the columns indicate the per cent of correct spellings of a word that may be expected in the grade named in the margin (See scale pp. 136–141). That is, if the words in column L are given as a test, the average standing of an entire second grade should be about 50 per cent; for a third grade, about 73 per cent; for a fourth grade, about 88 per cent; for a fifth grade, about 94 per cent; for a sixth grade, about 98 per cent; and for a seventh grade, about 100 per cent.

To illustrate: Suppose a teacher wishes to test the spelling ability of a second grade. Since the words in each column are of approximately equal spelling difficulty any number of words from that column may be given as a test. Twenty is a fair number to use. If 20 words from column L are given and there are eight children in the second grade, there would be 160 spellings of the words. About 80 of these spellings must be correct to give the grade an average spelling ability of about 50 per cent, which for that column is the standard score for the grade.

If 20 words are selected from the same column by which to test the spelling ability of a fourth grade composed of eight children, again there would be 160 spellings of the words. But if this grade possesses average spelling ability according to the Ayres Scale somewhere about 140, or 88 per cent of the spelling, must be correct.

To illustrate further: If a child is given a spelling test of 20 words from column L and spells 10 words correctly, he has second grade spelling ability. If he spells 15 words, or 75 per cent of them correctly, he has third grade spelling ability. If he spells 19 of them correctly he has fifth grade spelling ability, and so on.

WORD STUDY

G	H	I	J	K	
84	79	73	66	58	Grade II
94	92	88	84	79	Grade III
99	98	96	94	92	Grade IV
	100	99	98	96	Grade V
			100	99	Grade IV

by	day	men	nine	take	seven	near	became	price
have	eat	for	face	Mr.	forget	down	brother	become
are	sit	ran	miss	after	happy	why	rain	class
had	lot	was	ride	thing	noon	pill	keep	horse
over	box	that	tree	what	think	want	start	care
must	belong	his	sick	than	sister	girl	mail	try
make	door	led	got	its	cast	part	eye	move
school	yes	lay	north	very	card	still	glass	delay
street	low		white	or	south	place	party	pound
say	soft		spent	thank	deep	report	upon	behind
come	stand		foot	dear	inside	never	two	around
hand	yard		blow	west	blue	found	they	burn
ring	bring		block	sold	post	side	would	camp
live	tell		spring	told	town	kind	any	bear
kill	five		river	best	stay	life	could	clear
late	ball		plant	form	grand	here	should	clean
let	law		cut	far	outside	car	city	spell
big	ask		song	gave	dark	word	only	poor
mother	just		winter	alike	band	every	where	finish
three	way		stone	add	game	under	week	hurt
land	get		free		boat	most	first	maybe
cold	home		lake		rest	made	sent	across
hot	much		page		east	said	mile	tonight
hat	call		nice		son	work	seem	tenth
child	long		end		help	our	even	sir
ice	love		fall		hard	more	without	these
play	then		feet		race	when	afternoon	club
sea	house		went		cover	from	Friday	seen
	year		back		fire	wind	hour	felt
	to		away		age	print	wife	full
	I		paper		gold	air	state	fail
	as		put		read	fill	July	set
	send		each		fine	along	head	stamp
	one		soon		cannot	lost	story	light
	has		came		May	name	open	coming
	some		Sunday		line	room	short	cent
	if		show		left	hope	lady	night
	how		Monday		ship	same	reach	pass
	her		yet		train	glad	better	shut
	them		find		saw	with	water	easy
	other		give		pay	mine	round	
	baby		new		large		cost	
	well		letter					
	about							

	L	M	N
Grade II	50		
Grade III	73	66	58
Grade IV	88	84	79
Grade V	94	92	88
Grade VI	98	96	94
Grade VII	100	99	98
Grade VIII			100

catch	indeed	point	trust	almost	except	least
black	four	within	extra	brought	aunt	sorry
warm	herself	done	dress	less	capture	press
unless	power	body	beside	event	wrote	God
clothing	wish		teach	off	else	teacher
began	because		happen	true	bridge	November
able	world		begun	took	offer	subject
gone	country		collect	again	suffer	April
suit	meet		file	inform	built	history
track	another		provide	both	center	cause
watch	trip		sight	heart	front	study
dash	list		stood	month	rule	himself
fell	people		fix	children	carry	matter
fight	ever		born	build	chain	use
buy	held		goes	understand	death	thought
stop	church		hold	follow	learn	person
walk	once		drill	charge	wonder	nor
grant	own		army	says	tire	January
soap	before		pretty	member	pair	mean
news	know		stole	case	check	vote
small	were		income	while	prove	court
war	dead		bought	also	heard	copy
summer	leave		paid	return	inspect	act
above	early		enter	those	itself	been
express	close		railroad	office	always	yesterday
turn	flower		unable	great	something	among
lesson	nothing		ticket	miss	write	question
half	ground		account	who	expect	doctor
father	lead		driven	died	need	hear
anything	such		real	change	thus	size
table	many		recover	wire	woman	December
high	morning		mountain	few	young	dozen
talk	however		steamer	please	fair	there
June	mind		speak	picture	dollar	tax
right	shall		past	money	evening	number
date	alone		might	ready	plan	October
road	order		begin	omit	broke	reason
March	third		contract	anyway	feel	fifth
next	push		deal		sure	

WORD STUDY

O	P	Q	
50			Grade III
73	66	58	Grade IV
84	79	73	Grade V
92	88	84	Grade VI
96	94	92	Grade VII
99	98	96	Grade VIII

eight
afraid
uncle
rather
comfort
elect
aboard
jail
shed
retire
refuse
district
restrain
roya
objection
pleasure
navy
fourth
population
proper
judge
weather
worth
contain
figure
sudden
forty
instead
throw
personal
everything
rate
chief
perfect
second
slide
farther
duty
intend
company
quite
none
knew
remain
direct
appear
liberty
enough
fact
board
September
station
attend
between
public
friend
during
through
police
until
madam
truly
whole
address
request
raise
August
Tuesday
struck
getting
don't
Thursday

spend
enjoy
awful
usual
complaint
auto
vacation
beautiful
flight
travel
rapid
repair
trouble
entrance
importance
carried
loss
fortune
empire
mayor
wait
beg
degree
prison
engine
visit
guest
department
obtain
family
favor
Mrs.
husband
amount
human
view
election
clerk
though
o'clock
support
does
regard
escape
since
which
length
destroy
newspaper
daughter
answer
reply
oblige
sail
cities
known
several
desire
nearly

sometimes
declare
engage
final
terrible
surprise
period
addition
employ
property
select
connection
firm
region
convict
private
command
debate
crowd
factory
publish
represent
term
section
relative
progress
entire
president
measure
famous
serve
estate
remember
either
effort
important
due
include
running
allow
position
field
ledge
claim
primary
result
Saturday
appoint
information
whom
arrest
themselves
special
women
present
action
justice
gentleman
enclose
await
suppose
wonderful
direction
forward
although
prompt
attempt
whose
statement
perhaps
their
imprison
written
arrange

	R	S	T	U
Grade IV	50			
Grade V	66	58	50	
Grade VI	79	73	66	58
Grade VII	88	84	79	73
Grade VIII	94	92	88	84

forenoon	together	often	guess	meant
lose	convention	stopped	circular	earliest
combination	increase	motion	argument	whether
avenue	manner	theater	volume	distinguish
neighbor	feature	improvement	organize	consideration
weigh	article	century	summon	colonies
wear	service	total	official	assure
entertain	injure	mention	victim	relief
salary	effect	arrive	estimate	occupy
visitor	distribute	supply	accident	probably
publication	general	assist	invitation	foreign
machine	tomorrow	difference	accept	expense
toward	consider	examination	impossible	responsible
success	against	particular	concern	beginning
drown	complete	affair	associate	application
adopt	search	course	automobile	difficulty
secure	treasure	neither	various	scene
honor	popular	local	decide	finally
promise	Christmas	marriage	entitle	develop
wreck	interest	further	political	circumstance
prepare		serious	national	issue
vessel		doubt	recent	material
busy		condition	business	suggest
prefer		government	refer	mere
illustrate		opinion	minute	senate
different		believe	ought	receive
object		system	absence	respectfully
provision		possible	conference	agreement
according		piece	Wednesday	unfortunate
already		certain	really	majority
attention		witness	celebration	elaborate
education		investigate	folks	citizen
director		therefore		necessary
purpose		too		divide
common		pleasant		
diamond				

WORD STUDY

V	W	X	Y	Z	
50					Grade VI
66	58	50			Grade VII
79	73	66	58	50	Grade VIII
principal	organization	immediate	decision	judgment	
testimony	emergency	convenient	principle	recommend	
discussion	appreciate	receipt		allege	
arrangement	sincerely	preliminary			
reference	athletic	disappoint			
evidence	extreme	especially			
experience	practical	annual			
session	proceed	committee			
secretary	cordially				
association	character				
career	separate				
height	February				

2. One Hundred Spelling Demons of the English Language

(Reprinted here by the courtesy of Dr. H. F. Jones of the University of South Dakota.)

These one hundred words, Dr. Jones found, are the words which are most often misspelled by children in the elementary grades. They should be spelled in the fourth grade and repeated in each grade above the fourth.

always	dear	many	two
among	doctor	meant	too
any	every	making	trouble
again	easy	minute	tear
ache	early	much	tired
answer	enough	none	though
business	friend	often	through
been	February	once	they
built	forty	piece	tonight
busy	grammar	ready	truly
believe	guess	raise	used
beginning	hoarse	road	very
blue	half	straight	which
break	having	sugar	where
buy	hour	shoes	women
can't	heard	said	write
country	here	says	writing
could	hear	sure	would
color	instead	since	Wednesday
choose	just	some	wear
coming	knew	seems	whether
cough	know	separate	whole
don't	laid	their	won't
does	lose	there	wrote
done	loose	Tuesday	week

WRITING

WALTER B. HILL, State School Supervisor.

Writing should not be regarded as an end in itself, but rather as a means to an end. Nevertheless, writing is a subject of importance. The pupil is required to do written work every day, in spelling, grammar, history and other subjects. Many pupils will have occasion to make use of their writing ability as soon as they leave school. When a boy or girl makes application for employment, the character of the applicant is judged by the legibility and neatness of the letter, as well as by the English used, the statements made, and the references given. Boys or girls who write in a careless manner are not wanted in business establishments. Legibility, neatness, and speed in writing are at a premium in banks, law offices, ticket offices, real estate and insurance firms, stores, newspaper offices, the schoolroom, and elsewhere. From the vocational standpoint, therefore, writing is an important subject. This fact should be impressed on the pupils, otherwise they will have to learn it by bitter experience after they leave school.

One of the first aims in education is the "command of fundamental processes." A pupil who writes in such a way that his words, though properly spelled, are not readable, cannot be said to have command of either spelling or writing. The most beautiful English may be written in such a way as to make it resemble Sanskrit, the meaning of the characters being a matter of conjecture, and a fit subject for argument.

Much illiteracy is due to the fact that the illiterates were not taught to write when in school. No teacher should say, "My pupils cannot learn to write." Where there has been no learning, there has been no teaching.

A. PRECAUTIONS TO BE TAKEN AS TO LIGHT.

Although it is very important that children should be taught to write, if they learn at the expense of their eyesight, the price paid is too great. A great many people are wearing eyeglasses today and suffering from weak eyes and defective vision caused by abuse of the eyes in school days. The teacher should pay special attention to the following:

1. Test the child for vision. It may be that he is near-sighted or far-sighted and needs glasses to correct the defect.

2. See that the child has a *sufficient* light, when writing. Pupils should never be allowed to sit in a dark corner when writing.

3. Do not let children write with sunbeams falling across the paper

Direct sunlight is too intense and glaring. Adjust the window shades to remedy this trouble.

4. See that the light comes from the *right direction.* Of course, it should never come from the FRONT, as nothing is more ruinous to eyesight than constantly gazing into light. If the light comes from behind, the pupil must write in his own shadow, and if it comes from his right, his hand will cast a shadow on the page. Light should therefore come from the LEFT, and preferably over the left shoulder.

5. Do not let pupils write in a cross-light, if it can possibly be avoided. A pupil who writes with a window on his left, and one on his right, for instance, is writing by two lights of different intensity and direction, and the eye muscles are strained by his constant effort to adjust the pupils of his eyes to both lights at once.

6. The most common mistake made is to permit children to write by light that comes from a window BELOW THE LEVEL OF THEIR EYES. The child needs no light except that REFLECTED from the paper, and the direct light from the window, which strikes his eye, is much brighter than the light reflected from the paper. Unfortunately, this mistake cannot be avoided in many schools until the windows are replaced properly. A number of so-called school architects still imagine that school windows are for observational purposes, rather than for lighting.

B. PRECAUTIONS AS TO DESKS OF PUPILS.

In rural schools, there are usually desks of several sizes. A good rule is, "Rows should consist of desks of one size." The smallest desks should be placed nearest the windows. The desks should overlap the seats by at least two inches. One object of observing these precautions is to prevent pupils from raising the right shoulder higher than the left, due to the writing desk being too high. (Lateral curvature of the spine often develops from carrying one shoulder higher than the other.) Another object is to prevent pupils from crouching over to write, which tends to develop flat chest and round shoulders. As far as possible, each desk should be adjusted to the individual child, and the feet of the children should rest on the floor. Health is most important in education.

AIMS IN TEACHING WRITING.

1. Legibility is the first aim—"fancy writing" is not desired. President Cleveland once said that his only claim to greatness was the fact that his handwriting was almost illegible. Some allowance may be made for the shortcomings of greatness, but ordinary mortals are expected to write a readable script. Napoleon Bonaparte is said to have lost the battle of Waterloo because one of his field marshals could not read a dispatch written by the French Emperor. Illegible epistles, capable of most any interpretation the receiver chose to assign them, have been the cause of misunderstandings, quarrels and a vast amount of litigation. Legible

script is writing that can be read easily. The demands of legibility are as follows:

(a) Uniformity in the formation of letters—all a's alike, etc.
(b) Correct form of letters—*m* unlike *n*; *g* unlike *j*, etc.
(c) Proper spaces between every word in the same line.
(d) Lines parallel, with sufficient space between them.
(e) Proper use of capital letters. (See chapter on Grammar.)
(f) Correct punctuation. (See chapter on Grammar.)

NOTE: In the interest of ligibility, the practice of writing on the back of paper, writing up the margin, and the insertion of omitted words by use of a (x), should be discouraged.

2. NEATNESS. The teacher should refuse to accept any written work, written, torn, dirty or blotted, or lacking in neatness from any cause.

3. RAPIDITY. In writing, as in arithmetic, "time is of the essence," and the teacher should impress on the pupils the value of time by such proverbs as, "The mill will never, never turn, with the water that is past," and "The wheels of time turn only one way." Rapidity should not be sought until accuracy of form has been secured.

STATE ADOPTED WRITING BOOKS.

There is no magic in any system of writing. The writing books adopted by the State Board of Education are the Berry Writing Books. These books are sold at five cents a copy, and there is a book for each grade; thus Book Two is the "Mother Goose Book," and Book Four is the "Flower Book." The Berry method of penmanship is based on a combined movement of forearm and fingers, the letters being formed by finger movement and the transition from letter to letter being effected by motion of the forearm. The forearm is pivoted lightly on the largest part of it, just below the elbow. The children are taught to make letters correctly by copying models, under the teacher's direction.

POSITION OF FINGERS AND ARM.

Children do not learn to write automatically. The teacher should see to it that the following directions are observed. It is much easier to have children form correct habits, than to break them of bad ones.

1. The pencil or pen should be held lightly between the thumb and first two fingers. It should cross the second finger at the top of the nail, and rest just behind the knuckle. The pen should make an angle of about forty-five degrees with the surface of the desk.

2. The sliding rest for the hand is furnished by the third and fourth fingers, which curve under the middle of the hand, with the nails down. The fingers should touch each other at the second joint, as they do naturally when the hand hangs by the side. The end of the index finger should be about an inch from the point of the pen. The pen should never be gripped, as muscular pressure makes easy writing impossible.

3. The inside corner of the thumb, near the nail, should touch the pen at or just below the first joint of the index finger.

4. The wrists should be nearly flat and slightly raised above the top of the desk.

5. The forearm should rest easily on the largest part, below the elbow, and the elbow joint should extend over the edge of the desk.

POSITION OF WRITING BOOK OR PAPER.

The edge of the paper nearest the writer (the bottom) should make an angle of about thirty degrees with that edge of the desk nearest him, according to the slant of the script. The up-and-down movements (as in making letters l, f, g) should be away from and toward the body, the inclination of the paper causing the slant. The position of the paper is in keeping with the arc described by the swing of the forearm, and this makes it easier to keep the lines parallel.

MOVEMENTS USED IN WRITING.

See that in writing, the pupils use the muscles of the fingers and those of the forearm in conjunction. The formation of the letters by extending and contracting the thumb and first two fingers is known as the Finger Movement. This movement cannot, of course, be independent of the forearm. The rotary and vibratory motion of the arm, resting on the muscles below the elbow, is known as the Rest-Arm Movement. This movement facilitates the oblique and lateral motions used in going from letter to letter and from word to word, as well as in the formation of letters.

In the so-called "muscular movement writing" great reliance is placed on the motion of the arm. While exaggerated claims are sometimes made for this style of writing, the arm movement is easier to manage, the longer it is used. It is difficult to manage at first, and the pupils will depend too much on the Finger Movement alone in the beginning. This danger must be guarded against. Too much use of the finger movement soon tires the writer.

The various movements used in shaping the letters, such as making the large oval (capital O), the pull-stroke, push-and-pull stroke, the hill-stroke (used in forming m, n, etc.), the hook-stroke, and the formation of of words by letters, are fully described in "Suggestions for Teaching Writing," published by the B. D. Berry Company, 623-633 South Wabash Avenue, Chicago, Ill. The price of the book is forty cents. This manual is well illustrated and contains detailed directions for teaching writing through the seventh grade. As the Berry Books have been adopted in Georgia, the teacher should procure a copy of this manual.

GENERAL SUGGESTIONS.

1. *For teaching small letters*: Have pupils study the copy so that they readily recognize any letter, no matter where it is used. Each letter has

certain features which distinguish it from all other letters. The pupils must pick out these characteristics for themselves, as far as possible, under the teacher's guidance. This will serve to help the pupils in shaping the letter, and will promote uniformity in formation of letters.

Lead the pupils to see wherein certain letters are alike. For instance "m" and "n" are somewhat similar; "d" may be formed from "a"; "j" is made up of part of "g" and part of "i."

Do not confuse pupils by pointing out more than one defect at once. Have pupils select the best specimens of their own writing and, by comparison, see the most prominent fault in their letters.

In writing from a model sentence or word at the top of the copy book, children are apt to copy the last line of their own writing. Have them use a piece of paper folded so as to conceal all writing except the model and the line they are working on. Pupils should be required to master the writing of a given letter before trying to learn another one. Show that "i" is not "i" without the dot, and there is no "t" without the cross-mark.

2. *For teaching words*: After the letters have been mastered, the pupils can be taught to combine letters in forming words. This involves:

(1) Changes in the beginning and ending of letters so that they may be properly joined.

(2) Relative size of the letters.

(3) Proper spaces between letters.

(4) Study of word as a whole.

(5) Time used to write word.

Insist on a reasonable amount of speed from the first, or the pupils will get no conception of time value, putting all their attention on the proper shape of letters. For instance, in writing the word "on," the count for "o" is 2, and that for "n" is 2, so the total count for the word is 4; but a count of 1 should be allowed for going to the next word, hence the total count is 5. Compare words "far" and "for" as to joining of the "a" to "r" and the "o" to "r." In the word "time," "m" takes more space than "i." Emphasize accuracy, but before leaving the word, be sure that the pupils can write it rapidly. Speed in writing will cure the fault of tremulous writing, due to hesitant handling of the pencil or pen.

4. *For Teaching by Grades*:

First Grade: Use soft lead pencil, on unglazed paper. Make no attempt to teach forearm movement. Have pupils learn to white large oval (capital O) on the board, imitating work of teacher. Teach "pull stroke," "push-and-pull stroke," "hill stroke," and "hook stroke," making use of blackboard for demonstration and practice. Letters should be large. Teach pupils to write the word "ON," applying movements learned.

Second Grade: (Berry Book I) Use same writing materials. Teach pupils to hold pencil properly. Do not allow pupils to GRIP pencil—stress fundamental points of desk work, correct position, etc. Have children write capital O at desks. Teach children to write their own

initials, using capital letters. Emphasize the making of capital letters Pay attention to correct form of letters. Do not permit children to write until they become tired.

Third Grade: (Berry Book II) Pupils should begin work with pen and ink in this grade. Teach proper use of pen, blotter and pen-wiper. Work for improvement in shape of letters and for freedom of movement in forming them. Study letters to ascertain distinguishing characteristic of each one. Review strokes and letters learned. Insist on fair speed by counting as the children write. Ascertain the number of letters made per minute, and work toward a standard for the AVERAGE child in the grade. Teach proper position of paper on desk.

Fourth Grade: (Berry Book III) Practice actual writing of words, with emphasis on formal drill. Insist on correct type of movement. Formation of letters by finger movement, with arm movement used to pass from one letter to the next one. Begin on reproduction of letters and words from memory. Teach comma, question mark, quotation mark, etc. Practice all letters, capital and small, in writing words. Correlate writing with spelling.

Fifth Grade: (Berry Book IV) Before finishing this grade, the pupils should develop the habit of writing with correct movement. Increase in speed should be one aim of the work in this grade. Put emphasis on neatness, as secured by uniformity in shaping letters. Correlate writing with language and geography, in order to motivate the lesson and sustain interest. In this grade, the pupils should develop the ability to write new words acceptably, without making use of a model. (By vizualization.)

Sixth Grade: (Berry Book V) In this grade, the pupils should become fairly proficient in writing, making proper use of the finger and forearm movement (the combined movement). It is not natural for every pupil to write in the same way, but freedom of movement, and flexibility should be insisted on. Correlate the work closely with history and literature. Aim at obtaining a degree of proficiency that would be acceptable in a business establishment. Demand the best of each pupil. Put emphasis on automatic writing, so that the pupil's mind may be concentrated on the thoughts expressed by the sentence.

NOTE: In the higher grades, Berry Books VI, VII, and VIII may be used. The above suggestions are taken, in part, from the Berry Manual and Writing Books.

STANDARDS OF PENMANSHIP.

Proficiency in handwriting can be measured, just as proficiency in spelling, reading and in other subjects can be measured. By means of a writing scale, any specimen of handwriting can be "rated," or assigned to a place of certain rank in the scale. A writing scale is carefully made up by expert penmen and critics, after they have studied hundreds of specimens, including the best and the worst. By arranging the various specimens of handwriting in order, beginning with the best, it is possible to

classify the specimens and assign to each class its relative rank. In the division of this Manual devoted to "Special Subjects" will be found an article on "Educational Tests." By referring to this article, the teacher will find where a writing scale, with directions for using it, may be obtained.

ARITHMETIC

By President R. H. Powell, Prof. J. F. Wood, and Miss Emily Goodlet, of the South Georgia Normal School.

Statement of Principles.

The teacher of arithmetic needs to have at her command a large body of sound educational theory to guide her in her practice.

(1) She needs to know what are the more commonly recognized values of arithmetic and what are the legitimate and desirable ends to be attained through the teaching of the subject.

(2) She needs to know what subject-matter is best suited to the accomplishment of the desired results. She must have a keen sense of relative values. She must know what to select, what to reject, and to what to give special emphasis.

(3) She must know how to organize and in what order to present the subject matter to secure the best results.

(4) She must know and apply sound pedagogical methods and devices in teaching the subject.

(5) She must know how to measure or test the results obtained.

1. On a scale of values arithmetic is universally recognized as holding a place second only to that of language. In fact the need for number concepts seems to be as fundamental and as universal in human history as the need for language itself. The following are the more important reasons assigned for teaching arithmetic in the elementary schools:

(1) Because of its immediate practical or utilitarian value.

(2) Because of its preparatory value.

(3) Because of its value as a language.

(4) Because of its value as a means of presenting concisely, vividly, and graphically many kinds of valuable data, social, scientific, economic, industrial, etc.

(5) Because of its culture value.

The realization of the above named values is the ultimate goal of arithmetical instruction. The means to this end constitute the teacher's immediate aim, viz: To develop in the child the specific habits and abilities necessary to cope successfully with the arithmetical situations and problems incident to an efficient life lived under modern social conditions.

Stated more specifically and concretely, the aim is to develop those special habits and abilities which make (1) for accuracy and speed in

dealing with the fundamental operations, and (2) for efficiency in problem solving.

2. In the second place, the teacher must know what to teach. It may be said that in this matter the teacher has no choice, since the state prescribes the textbooks to be taught. It needs to be borne in mind, however, that what the state prescribes is the minimum, and that this minimum is to be adapted and supplemented by the teacher.

On account of their social significance, it is recommended that the following topics receive special emphasis: The fundamental operations with whole numbers and fractions, simple mensuration of surfaces and solids, percentage, simple interest, bills and accounts, saving and loaning money, banking, borrowing, discount, building and loan associations, investments, stocks and bonds, levying taxes, public expenditures, insurance and public utilities.

For lack of social significance the following topics should be omitted from the elementary curriculum: Apothecaries weight, troy weight, furlong and rood in square measure, dram and quarter in avoirdupois weight, surveyors tables, reduction of more than two steps, G.C.D. and L.C.M. except by inspection, true discount, cube root, partnership, compound proportion, compound and complex fractions, all fractions with denominations such as 13, 17, 19, 23, 29, or greater than 36, and all decimals with more than three places; annual interest, progression, and allegations.

3. In the third place, the subject matter must be organized according to the logic of the learner rather than according to the logic of the subject as a science.

4. In the fourth place, the teacher must know how to teach the subject. The results of modern psychological research justify the division of arithmetic into two clearly defined fields: One, that of drill, wherein the child is taught to add, subtract, multiply, and divide skillfully whole numbers and fractions; the other, that of problem solving, wherein the child is taught to perceive quantitive relationships, to understand the meaning and use of such terms as: commission, discount, stocks, bonds, taxes, levies, insurance, etc., to appreciate arithmetical situations, to understand the principles operative in the present-day business world, and to solve the many types of problems incident to our complex civilization.

Methods of instruction must be chosen in the light of its purposes. As stated above, the immediate aim sought in teaching arithmetic is a twofold one: (1) Efficiency in the fundamentals; (2) efficiency in problem solving. In the first there is demand for habits of accuracy and speed in the fundamentals; in the second there is demand for reflective thinking, systematic inference and proof.

The method appropriate to the first is systematic well motivated drill wherein are applied the laws of habit formation. Stated in psychological terms, these laws are: (1) The process to be habituated must be made focal in consciousness; (2) there must be attentive repetition till the habit is stamped in and made automatic; (3) no exceptions must be allowed.

Stated in popular terms, this means that the child must pay attention to the form of the act or process that is to be made habitual; that he must give much time to a regular thoughtful practice; and that he must do or say the thing the same way each time. For example, 6×9 must always call for 54 as a response, and $1/2 \div 3/4$ must always call for $1/2 \times 4/3$.

In solving problems the method to be used is that of induction or deduction, depending on the nature of the problem and the maturity of the student. With young children the work must be made as objective and concrete as possible, and this calls for the inductive method.

(5) Finally, the teacher must be able to test or measure the results of her work as revealed in the accomplishments of her students. This means that she must have a reliable standard of measure. The traditional examination test has been found to be inadequate. Recently much time and labor have been devoted by experts in the field of experimental pedagogy to the task of devising standard scientific tests or scales for measuring educational products. As a result there is now available a number of standardized tests with complete directions as to the method of applying them. The most popular and possibly the best one of these is "Courtis Standard Research Tests," which can be secured from S. A. Courtis, 82 Eliot Street, Detroit, Michigan.

OUTLINE OF WORK BY GRADES.

First Grade.

The arithmetic work of the first school year is so closely related to the children's lives in both material and method that it can hardly be called a separate subject. Only so much of number work is given as will serve a definite end in such activities as nature study, garden making, games, and drawing. It is informal and incidental in the sense that it gives the child number experiences in school situations which arise naturally and call for a real use of numbers. The aim is to develop the number concept through these experiences and to meet the child's needs in counting, comparing, and measuring.

Counting and Reading Numbers: The pupil learns to count and read the numbers to one hundred. He counts the number of children in his class, those seated in each row, absent or tardy, books, pencils, and papers needed for each row. He reads the numbers of pages of his book, date on calendar, and house numbers. He counts groups of objects as marbles, beans, blocks, and children marching by 2's, 4's, 5's, and 10's. When learning to tell the time, from the clock face, he is learning to read the Roman numerals through XII.

Writing Numbers: As the number idea is developed, the child is taught to write symbols 1, 2, 3, etc., paying especial attention to the form of the figures. In the number games he soon learns to keep his own score.

Measures: By handling the ruler in the art and industrial work, he learns the inch, six inch, foot, yard. "Playing store" is a successful way

of teaching pint, quart, pound, dozen, half dozen, cent, nickel, dime, dollar. Day, week, month, year are taught by keeping records, making weather charts, etc.

Addition: The simple combinations of two numbers with the inverse subtraction cases are taught with objects and by games in which simple scores are kept; such as, Ring, Toss, Tag, Bean Bag, Hull Gull, Dominoes.

In the second half of this year the work with numbers may be more formal and there should by the end of the year be a conscious checking up of the number facts learned. The Addition tables should be known at least as far as the sums of 10 and 12. The vertical form of addition as

4
3
–
7

is more frequently used for drill than 4+3=7 because it is the form they will need in actual calculation.

Fractions: The ideas and forms of the fractions are taught by frequent use of expressions like 1/2 of an apple, 1/3 of the class, 1/4 of the foot ruler.

Language: The teacher should provide such experiences as will make clear the language of arithmetic: taller than, larger than, equal, twice as large, and, less, more than.

Problems: Simple problems involving easy number combinations are suggested by the children's interests and experiences. These should be oral and the children encouraged to make up problems themselves.

SECOND GRADE.

Review and drill upon the number facts taught during the first year. The oral work of counting, reading numbers, making problems, etc., continues. Games are constantly used and scores of increasing difficulty are recorded. More time is now given to written work. The spirit and method of teaching new facts are the same, yet objects are used only so long as necessary. Their continued use may be harmful.

Reading and Writing Numbers: Numbers to 1000. Counting 100 by 2's, 5's, 10's, 3's, etc. Reading, writing, and spelling names of numbers through 100. The meaning of the signs +, –, ×, ÷, and =.

Roman Notation: Reading and writing numbers through XII. Reading chapter numbers in their books through fifty.

Measures: Pint, quart, gallon, peck, bushel, quarter and half dollar, half hour and quarter hour; half inch, quarter inch, square inch, ounce, pound.

Addition: Addition facts completed through the forty five combinations. Both forms 3+2=5 and 2+3=5 are taught as the knowledge of one does not guarantee the other habit. Speed and accuracy are given through games and card drill. Addition of numbers of two

figures involving carrying may be given near close of year but not more than four or five numbers in a column. Establish early the habit of checking results by adding from top down and from bottom up.

Subtraction: Numbers of three orders used, figures in subtrahend not to exceed those of the minuend.

Multiplication: The idea of times a number is developed through grouping objects and by column addition of the same, then the product learned both ways as $3\times5=15$ and $5\times3=15$. The multiplication tables of 2's, 10's, 5's, 3's, and 4's are taught in this order and drilled upon through games and devices.

Division: This is taught as the inverse case of multiplication. The fact that $4\times5=20$ and $5\times4=20$ brings out the inverse facts of $20\div4=5$ and $20\div5=4$. Oral drill on how many 5's in 20, 2's in 20, 3's in 20 is good preparation for short division.

Fractions: 1/2, 1/3, 1/4, 1/8, 1/5, 1/6 are taught and orally added and substracted, using objects or folding paper.

Language: The pupil is taught the use of exact language which accompanies clear thinking. The terms used must be given meaning, as, sum, difference, addition, substraction, units, tens, hundreds, rectangle, cube, square inch.

Drill: Much drill is needed. Be careful to drill in forming habits in the way in which they will continue to be used. Do not allow any habits to be formed which need to be broken if this can be avoided. There is need for a great number of specialized habits.

For the second half of the year's work the teacher may use the text book, Morey's Little Folks Number Book. But the teacher should remember that the student is hardly advanced enough in reading to use this text without constant assistance.

GRADE III.

Review work of second grade.

The work of this grade should give (1) accuracy and rapidity in the four fundamental processes operating in intergers and fractions, (2) simple exercises in the application of these processes to the real problems of life, (3) and a knowledge of the tables of measurements which are in common use. There is still a place for games, but the selection should be made to suit the age and changing ability of the children. Give thorough drill upon the four fundamental processes. Beginning in this grade, continuing through the following grades, the standard tests should be used to determine the standing of the class as compared with the same grade in other schools and graphs made to show improvement from time to time. The pupil may be stimulated to greater effort through rivalry with his own record.

The work is based upon the state adopted text book, yet the teacher should make a choice of subject matter offered and supplement this to meet the needs of this particular class and this community.

While much time is still given to oral drill in both abstract and concrete problems, the operations now involve larger numbers, and the child begins to acquire the habit of writing his computations.

Notation and Numeration: Numbers to 1,000,000. Roman numerals to C. Reading and writing dollars and cents (but there is no need to explain the decimal point except to say that it separates dollars and cents).

Counting: By 6's, 7's, 8's, 9's as preparation for these multiplication tables.

Addition: Review the 45 combinations of one-figure numbers. Written work with four figure numbers, including dollars and cents, but long columns of figures should be avoided. The carrying in addition is the new element and the child should be prepared for this by a thorough understanding of the place value of a number.

Substraction: Numbers of four digits, including dollars and cents, some of the digits of the subtrahend to exceed those of the minuend Checking of results should be required.

Multiplication: Tables completed through 10's. Multiplication with one and two figure multipliers.

Division: Much oral division by one-figure divisors, including numbers which give remainders. Written work with numbers of four orders and one-figure divisors.

Fractions: Oral work in addition, substraction, and reduction of fractions having the same demoninators. Reduction should be introduced by means of objects, and drawings, but these discarded as soon as possible. Drill on the fractions in common use as 1/2, 1/3, 1/4, 1/5, etc.

Terms taught: Addends, remainders, minuend, subtrahend, multiplier, product, divisor, surface, perimeter, area.

Problems: Many problems of one step based upon school experiences as, buying supplies, luncheon, personal accounts, should be used.

Text Book: Wentworth-Smith Essentials of Arithmetic, Primary Book, through p. 166.

FOURTH GRADE.

The essentials of arithmetic will have been touched upon by the close of the fourth school year. It is important that the work be so planned and executed as to insure a mastery of the fundamental operations thus leaving the pupil free to concentrate on the reasoning side of the work and on the study of business application of these processes. The aim should be to secure (1) accuracy by always checking, (2) rapidity by setting a time limit upon all work. In doing this the school is giving valuable training for the business world.

Reading and Writing Numbers: Numbers to 1,000,000. Some practice in reading billions because of the interest in Liberty Loans, indebtedness of foreign countries, and big business. But the operations should be

confined to smaller numbers. Teach use of the Roman numerals, C, D, M.

Addition and Substraction: Rapid oral drill, especially on the combinations with 7, 8, 9. For written work, numbers of not more than six orders. Much practice in making change. By this time the pupil should understand and use intelligently the terms sum, remainder, difference, minuend, subtrahend.

Multiplication: More drill on the tables. These may be extended to include the 11's and 12's. Use multipliers of two and three orders and be sure to include multipliers containing zeros; as, 300, 204.

Division: Short division reviewed. Long division introduced. Dividend not to exceed six orders, and divisor, two or three orders. Teach checking of division by multiplying quotient by divisor. Teach the terms, divisor, dividend and quotient by requiring their use in explanation of work. Teach first how to divide, how to get the right answer, then explanations and reasons may be given as the intelligence of the class demands them. The child will get his reasons from his experience with numbers.

Fractions: Much oral work in addition, substraction and reduction with the common business fractions. Some written work with fractions whose common denominators may be determined by inspection.

Measures: The tables of measures as given in the text book should be reviewed and taught by actual experiment. Have the measures in the school room, even if they are only borrowed, and have the pupils make the tables by doing the work of weighing and measuring. Much of the poor work in arithmetic results from the use of meaningless terms. Give the pupils experience with concrete things which will put meaning into the processes. Show them that there is no principal involved which is not found in intergers.

Textbook: Wentworth-Smith Essentials of Arithmetic, Primary Book completed.

FIFTH GRADE.

For review of fourth grade work much new material using appropriately larger numbers will be found in the textbook.

Two-step problems are introduced and more attention given to the method of solving problems. Exactness of thought is indicated by accuracy of statement. The pupil should know what a problem states and what it asks for. The solving of a problem depends in a large measure, upon the ability to read the problem, so special attention should be given to the language difficulty. The kind of problems used should be those that life then and later will set. Make many problems related to the grade subject-matter in geography, fine and industrial arts, nature study, industries of the community and local business. Do not hesitate to substitute these for text book problems of less value.

Measures: Continue the work of the fourth grade, selecting only

the practical cases for extended study. Operations with numbers of two denominations will meet the usual demands.

Common and Decimal Fractions: This is the important work of the grade. Give much practice in the four operations with the small fractions of ordinary business, and rapid, oral and written drill in the reduction of common fractions to decimal fractions and vice versa. Little need is found for fractions with denominations greater than 16, 32, and 36. A common denominator can be selected by inspection. Common factors should be taught and cancellation used as a method of shortening work. In such processes as division of a fraction by a fraction teach first how to do it. It is important to build the habit of inverting the divisor and multiplying and why you do so is not so important.

The pupil has been using decimal fractions but now the use of the decimal point is explained and the name of the decimal orders taught to millionths. In the division of decimals, the divisors should be limited to three decimal places. At this point an elementary treatment of percentage may be introduced, and there should be free interchange of per cent forms, decimal fractions, and common fractions as, ¼=25÷100=0.25=25%. Use aliquot parts as, 12½c=$⅛.

Textbook: Wentworth-Smith Essentials of Arithmetic. Intermediate Book—to page 185.

SIXTH GRADE.

Review the work of the previous grades. The teacher should be familiar with the course of study as outlined for each grade, and should continue to drill along these lines.

The leading features of this year's work are percentage and its applications, particularly discount, profit and loss, commission and interest. Only real cases are considered, and the examples follow as closely as possible to the common business customs of the mercantile world. Emphasis is put upon finding a per cent of a number and finding what per cent one number is of another. Give thorough drill upon the common per cents and fractions of business, as 1/3=33 1/3%, etc.

Measures: This should be confined to measurements of simple surfaces and solids, and should include practical cases of house building, plastering, and carpentering which are going on in the school neighborhood.

Textbook: Wentworth-Smith Essentials of Arithmetic, Intermediate Book completed.

SEVENTH GRADE.

In the seventh grade there should be a systematic review of all number facts and processes taught. This review should be made from a higher standpoint and new material introduced. The pupil should show a real acquaintance with numbers by a correct use of mathematical language. Most of the time of this grade is given to the business applications of percentage. The aim of the course is to give a working

knowledge of business practices, to explain the ordinary business customs and terms, and to apply the arithmetic learned to the genuine problems of life.

The boy and girl should now be informed about the business life into which they will soon enter. They should be familiar with the number experiences involved in the following:

Simple accounts: Income and expenditures of daily life, the farm, home or shop.

Buying by mail and paying by check or draft.

Investing money in Liberty Loan Bonds and Thrift Stamps.

Fire and Life Insurance.

Work of the clearing house of the banks. Deposit Banks and Saving Deposits.

Levying taxes in town or city.

Important foreign measures.

Foreign exchange in current use.

Sale slips, bills, and receipts.

Textbook: Wentworth-Smith Essentials of Arithmetic, Advanced Book.

REFERENCE BOOKS FOR THE TEACHER.

How to Teach Arithmetic, Brown and Coffman; The Teaching of Arithmetic, David Eugene Smith; The Teaching of Arithmetic, Klapper; Supervision of Arithmetic, Jessup and Coffman; Teaching of Primary Arithmetic, Suzzallo; A Text Book on Teaching Arithmetic, Stamper; Special Method in Arithmetic, C. A. McMurry.

GEOGRAPHY

MISS JULIA M. BETHUNE, G. N. & I College.

In order that the Study of Geography may not be meaningless, the emphasis is no longer to be placed on the study of the earth in itself, but is to be placed on the study of the earth in its relation to man and life. Therefore we cannot study Geography without considering the life and work of mankind.

The study of Geography has been inefficiently done if some ability has not been developed in the pupils to image and interpret things beyond their horizon by means of and through the use of illustrative materials *seen* and *handled*.

Since the power of imagination and interpretation grows as the pupils progress, provision should be made in every year where Geography is taught, to place an emphasis each year on that phase of the subject which is best fitted to the child's interest and experience. By beginning with the near and familiar types of industrial activities, together with the observation of physical conditions which affect industry, notions are given through which the children may image the remote areas beyond their vision. In this way an effort is made to bring into use continually the old, related knowledge to interpret and comprehend the new subject matter to be presented. The work presented in each grade then grows out of the ideas gained in the preceding grade. Following such a plan, it will no longer be possible to lay aside completely the study of one continent when the subject of another new continent is begun.

No extensive study of geographical facts can be made in the primary grades, but the purpose in these grades is to provide the child with opportunities for observation and experience which will form a basis for more definite Geography work in the upper grades, when he is required to go in imagination to different regions which lie beyond the horizon of his observation and experience.

An attempt must be made in the primary grades to arouse and stimulate an interest in *People* and *Things*. In order to do this the Geography work in the immediate locality of the child must serve as a starting point, and through this as a center of interest the studies of home life are constantly used as a basis of comparison and contrast for the lives and conditions of distant people.

THIRD GRADE.

Home Geography.

I. Seasonal Changes:
   1. Relation of Changing Seasons to the Life of Children.
      (a) Games played in other seasons compared.
      (b) Food.
      (c) Clothing.
   2. Relation of Changing Seasons to life of Animals.
      (a) Preparation for Winter, thicker fur.
      (b) Storing of food.
      (c) Building nests and homes.
   3. Relation of Changing Seasons to Occupation of People about us.
      (a) In the Home.
      (b) In the Garden.
      (c) In the Field.
   4. Relation of Changing Seasons to Vegetation.
      (a) Seed formation and seed dispersal.
      (b) Dying of Plants.
      (c) Changing of coloration of Trees.
      (d) Trees that lose their leaves.
      (e) Evergreen Trees.

II. Weather Conditions:
   1. Sun's apparent daily path across the sky.
      (a) Observation of position at different hours of the day.
      (b) Compare length of days for several weeks.
   2. The Wind.
      (a) Study Weather Vane.
      (b) Directions of the Wind.
      (c) Force of Wind, kites, windmills, movement of branches of trees
      (d) Changes the direction of the Wind causes:
      What wind brings warm weather with clouds and rain?
      What winds bring clear weather?
      What winds bring cold weather?
   3. Make Weather Record Showing.
      (a) Date.
      (b) Direction of Wind.
      (c) Appearance of Sky.
      (d) Temperature.
      (e) Kind of day, rain, frost, ice, snow, dew, or fog indicated on chart.

III. Water and land forms in the Community.
   1. Water Supplies, needs of man, plants, and animals.
      (a) Observation of wells and springs.
      (b) Uses of underground water, how obtained, in our homes, by plants, by trees.
      (c) Study briefly water supply of Community.
   2. Streams, (Visit stream in neighborhood).
      (a) Description, size, direction, bed, banks, vegetation near stream.
      (b) Same Stream after rainfall, note and explain change.
      (c) Work of stream — what it carries, where it gets load and where it carries it.
      (d) Lakes and Ponds:
      Cause of broadening of Stream.
      Uses of Ponds and Lakes, fishing, etc.
      Swamps, how caused.

Life of vegetation and animals.

3. Rivers.
   (a) Rill, rivulet, brook, branch, fall, creek.
4. Oceans.
   (a) Means of travel.
   (b) Atlantic Ocean studied in connection with
   Story of Columbus.
   Story of the Pilgrims.
5. Types of land in the neighborhood. Effect of land upon the making of a settlement. Our homes and where they are built.
6. Effect of surface features in securing necessities of life. Occupations of neighborhood determined by land and water forms. The farm interest centered on principal crop of community.

IV. Map Work.

Introduction to the study of map work. Care must be taken that children are not called upon to use symbols on the maps until they know thoroughly the things for which the symbols stand.

1. Maps Made.
   (a) Schoolroom; (b) School house; (c) School grounds. Maps should be made on blackboard or manilla paper.
2. Location and Direction.
   (a) Let child walk about room, class indicate on map the direction the child went.
   (b) Locate from the map various objects in the room in relation to the teacher's desk.
   (c) Link location with direction.

World Geography.

I. Stories of Child Life in other lands.

The fact that people live differently because the environment is different should be emphasized in presenting this phase of the work.

1. Life in Cold Lands.
   (a) Eskimo Life, food, clothing, shelter, mode of travel.
2. Life in Temperate regions.
   (a) Life in the Highlands, Swiss boys and girls.
   (b) Life in the Lowlands, Dutch Children.
   (c) Life of Children in England, France and Germany presented in connection with Christmas customs in different lands.
   (d) Life of Indians, homes, clothing, food and occupation.
3. Life in Tropics.
   (a) Child life on the Desert. Little Arab boy.
   (b)) Child life in Hawaii, homes, food, kinds, means of securing food, preparation and serving, clothing and modes of travel

References for Children:

Big People and Little People of Other Lands.—Shaw.
How We Travel.—Chamberlain.
How We Are Clothed.—Chamberlain.
How We Are Fed.—Chamberlain.
How We Are Sheltered.—Chamberlain.

References for Teachers:

The Teaching of Geography.—Dodge and Kirchwey.
Home Geography.—Dodge.
Stories of Other Lands.—Johonnot.

FOURTH GRADE.

In this year of the child's school life the use of the Geography textbook necessitates a careful study of its proper use and at the same time furnishes excellent training in right habits of study.

This is the period when the memory is most active and mechanical processes appeal. This is the time to fix the basal facts regarding location or place Geography, not by learning arbitrary and meaningless lists, but by enriching the content and establishing proper habits in the use of Map Work.

An abundance of illustrative material, such as pictures, railroad folders, post cards, guide books, and collections of products, aid in increasing interest. Every Fourth Grade should be provided with an eighteen inch globe and wall map in order that the main facts about the location of various places studied in this grade may be fixed in the child's mind. Schools being deprived of such material through lack of funds may have this need supplied if an ingenious teacher has charge of this grade.

Maps may be made by the pupils under the direction of the teacher using paper pulp, flour and salt, sand and white glue. This not only adds to the equipment of the school, but provides an opportunity for the child to take an active and constructive part in the Geography work.

HOME GEOGRAPHY.

The aim of the work of this grade is: (1) to emphasize and extend the study of activities of people of other nations; (2) To have the children appreciate the value of our products and activities to people of other lands, and to see how their products contribute to our welfare; (3) By increasing their knowledge to broaden their sympahties.

Through the knowledge of trade and exchange gained in the Third Grade and through the child's experience the necessity of roads has been shown. A study of early modes of travel is made to emphasize the present ease, speed and safety in transportation. Transportation by land and water contrasted. From a study of communication and transportation the pupils may pass logically to a study of the world as a whole.

THE STUDY OF THE WORLD AS A WHOLE.

Here both reference work and globe work are of importance and service. Through them the child may learn:

1. That the land on which we live stretches away for many miles in every direction and is surrounded by water.
2. That the earth is round and people may travel around it.

   Story of Columbus told and arranged by children for a dramatization showing.

   (a) Boyhood of Columbus.
   (b) Columbus with the sailors.
   (c) Columbus before the King and Queen.
   (d) Columbus preparation for voyage.
   (e) Columbus claims land in name of Spain.

3. Motions of Earth.
   (a) Rotation. Give names axis and poles. Consequence of rotation, succession of day and night.
   (b) Revolution. Give the year as a unit of time.
4. That the Earth is warmed and lighted by the sun and is surrounded by the air.
5. That some parts are warmer than others.
   (a) Fix the idea of relation of direct rays to summer and slanting rays to winter.
6. That the earth is divided into zones.
   Imaginary trips made to Equator where heat is continuous and rays of sun are coming directly on surface of Earth.
   To Arctic zones with slanting rays and continuous cold.
   To Temperate zones where climate conditions vary.
   (a) Make chart showing characteristic color to represent different zone, Frigid shown blue, Temperate with yellow and Torrid with red.
   (b) Make chart showing animal life in zones. Children collect pictures and mount in proper places.
   (c) Make chart showing animal life in zones. Pictures and food products mounted.
   (d) Make chart showing Life of Man in zones.
7. That the Earth is so large it takes a long time to travel around it.
8. That there are a number of large bodies of land and water.
   (a) Compare areas of land in cold regions with areas in hot regions.
   (b) Compare areas of land and water on the face of the Earth.
   (c) Continents, teach their names.
   (d) Oceans, teach their names.
9. That Continents and Oceans have special characteristics as determined by:
   Location, climatic conditions, shape and size.

As a means toward this end free-hand paper cuttings defining the shape and comparative size may be made and mounted by each child as each continent is presented for study. The following points to be emphasized:

10. That maps have a fixed position. This refers to the fact that maps are printed in books and hung on walls so that the northern part of the country is towards the top of the map, the southern part towards the bottom, the eastern part towards the right and the western part towards the left.
    Brief study of Life in many lands.

Africa:

Life along the Nile. Life of Arab on the Desert. Life of Pygmies in the Forest. Ivory hunting in Central Africa. Diamond mines of Kimberly.

Europe:

Cutlery, England. Fishing in Norway. Wheat in Russia. Flower bulbs in Holland. Toys in Germany. Silk in France. Time-pieces in Switzerland.

Asia:

Tea and Silk of China and Japan. Pearls, Ceylon. Homes made of Bamboo, little furniture. Rice, Fish and Vegetables. Customs of eating and serving. Chop sticks, Manufacturing, Paper making, Ivory Carving and making of Gunpowder.

Australia:

Animal life, the Kangaroo and Sheep. Plant life contrasted and compared with that of our country.

South America:

Rain forests of the Amazon. Rubber and Coffee of Brazil. Sheep, Cattle and Wheat of Argentina.

North America:

Detailed study is made of this continent, emphasizing:

(a) Position in zones, in Hemispheres, as to bordering waters, in relation to other continents.

(b) Form, General, roughly triangular, actual determined by its more important indentations.

TOPICS FOR STUDY.

(a) Sugar, maple and cane.
(b) Rice, Southern United States.
(c) Cod Fishing, Salmon Fishing in Columbia River region, Oysters, Cheaspeake Bay.
(d) Ostrich Farm, California.
(e) Mining in the Mountains.
(f) Lumbering.
(g) Coffee, Mexico.
(h) Agriculture, grazing and dairying.

The general geographic conditions of a country may be approached by either of three plans: (1) Through a study of its people; (2) through a study of a typical region; (3) through a study of a typical industry.

Ilustrate in either of the following forms the life in the different continents:

(a) Arranging a collection of Pictures.
(b) Sand table.
(c) Paper cutting.
(d) Brush and Paint.

References:

Geographical Readers.—Carpenter.
Chinese Life in Town and Country.—Knox.
Japanese Life in Town and Country.—Knox.
The Little Journey Series.—George.

FIFTH GRADE.

In this grade the study of North America as presented in the Fourth Grade should be reviewed and extended with special reference to the source of raw materials, the chief routes of distribution and leading centers of manufacture. The forces determining all these, such as position, surface, drainage, and climate make up the Geography of this year.

In the study of North America special reference is made to the United States and emphasis is given to the study of Georgia. Much of the work should be vitally related to the food and clothing supply, the manufactures and commerce of the State and Home Environment of the child.

North America.

1. Early History.
   Its discovery, explorations, natives.

2. Position.
   In hemisphere, in zones, in relation to other continents, in relation to oceans.
3. Form.
   Relative, actual.
4. Size.
   In relation to other continents.
5. Surface: Principal highlands, position, and extent.
6. Climate: Winds from oceans, from warm regions, from cold regions, prevailing winds. Rain falls where greatest, why, where scarce and why.
7. Drainage: Rivers, seas and lakes.
8. Vegetable Life.
9. Animal Life.
10. Mineral Resource.
11. People.
12. Occupations; as determining distribution of population.
13. Productive Industries in relation to resources, supply and demand and commercial advantages.
14. Development of Commercial and trade centers and routes of distribution.

United States.

A knowledge of the United States is obtained by studying the great industrial activities that stand out most strongly in our country.

I. Agriculture.
   1. Wheat.
      (a) Conditions favorable to growth. States comprising leading wheat regions.
      (b) Milling and shipping centers, due to ease of transportation, cheap power, near to wheat fields.
      (c) Export to European countries.
      (d) Comparisons made with other wheat raising countries, Argentina and Russia.
   2. Corn:
      (a) Conditions favorable to growth, States comprising the Corn Belt.
      (b) Products, Starch, Syrup, Pith used for smokeless powder.
      (c) Food value to man, to animals.
      (d) Export limited, reasons.
   3. Cotton.
   4. Sugar.
   5. Tobacco.
   6. Hay, Rice, Barley, Rye, Potatoes, Fruits, Vegetables, treated in like manner as those above.

II. Stock Raising.
   1. Cattle.
   2. Sheep.
   3. Trade and Transportation.
   4. Wool and Hides.
   5. Horses and Mules.
   6. Dairying and Poultry.

III. Mining:
   1. Coal.
   2. Iron.
   3. Other minerals and metals. Gold, Silver, Petroleum, etc.

IV. Lumbering: Centers for:
  (a) Hard woods, furniture, ship-building.
  (b) By products, Dye, Woods, Sugar, Maple, etc.
  (c) The Pine and its products.

V. Manufacturing:
  Place United States holds among other countries.
  Reasons for rank:
    (a) Facilities of transportation.
    (b) Abundance of material.
    (c) Inventive talent.
    (d) Abundance of fuel and water power.
    (e) Wealth of country.

VI. Commerce.
  Exports.
  Imports.
  Transportation.

Summarizing the study of the United States, the country is divided into the different groups of States. The characteristics and essential facts of each group are taught.

1. Names of States in group with capitals.
2. Location in the United States.
3. Surface and drainage of the group. Mountains, waterfalls, lakes, etc.
4. Soil, productive and non-productive areas.
5. Climate, prevailing winds, rainfall.
6. Industries. Products, raw and manufactured.
7. Transportation Routes.
8. Principal Trade Centers of the group.

The study of the State of Georgia emphasized when a study is made of the Southern States.

1. Early history.
2. Location, teaching boundaries.
3. Area, shape taught through map construction.
4. Surface.
5. Climate.
6. Occupations and Industries. Products.
7. Commerce and important trade centers.
8. Manufactures.
9. Home county in relation to the State. Activities of the people in county, principal road-ways and settlements in county.

SUGGESTIVE WORK TO BE DONE IN CONNECTION WITH FIFTH GRADE GEOGRAPHY.

1. Make Relief Map of North America and United States.
   (a) Charcoal or crayon.
   (b) Flour and salt; paper pulp or sand and white glue.
   (c) Map may be made on sand table or in school yard.
2. Free-hand cutting of map of North America, the United States, the State of Georgia.
   (a) Indicate principal rivers, mountains, cities, etc.
3. Outline maps made of United States showing groups of States.
4. Sand Table Problems:
   (a) The story of Cotton.
   (b) Life on a Ranch.
   (c) Means of Transportation of Early Settlers of the United States.
   (d) Means of Transportation of today.

5. Charts: Cotton, Corn, Lumbering, Wheat, Pine Tree Products, Sugar Cane.
6. Product Maps made on unbleached muslin in indelible outline of the United States and Georgia.
7. Booklet of Georgia, including early history, Legend of Cherokee Rose, and a summary of Geographical facts centering around the study of one state.

REFERENCES:

Great American Industries.—Rocheleau.
Our Own Country and Her Possessions.—Sutherland and Sanford.
Our American Neighbors.—Coe.
The Story of Cotton.—Brooks.
Readers on Commerce and Industry.—Carpenter.

SIXTH AND SEVENTH GRADES.

The important facts that have been accumulated in the three previous grades are gathered together in the Sixth and Seventh Grades, showing the relationship between surface, climatic conditions, and the life of man. In this second study of physical factors and geographical forces a more detailed study can be made than before. Now the process and the forces at work in producing a physical environment may be emphasized and the features and facts of an environment may be explained.

I. Principles of Geography.
   1. Form and Size of the Earth:
      (a) Primitive notions.—Early belief that it was flat. Effect on exploration.
      (b) Proofs of the shape of the Earth.
   2. Motions of the Earth.
      (a) Rotation, causing day and night.
   3. Latitude and Longitude: Show how a spherical earth rotating causes the sun to seem to rise and set and cross the various meridians at different times.
   4. Seasons: Revolution of the earth on inclined axis gives change of seasons.
   5. Climate:
      (a) The Atmosphere. Its composition, pressure, etc.
      (b) Water Vapor. How it gets into atmosphere. How it gets out of atmosphere and forms into which it condenses. Clouds, dew, fog, rain, frost, snow, hail.
      (c) Temperature. Land and water temperature compared. Comparison at the Poles and Equator. Study made of how distribution of temperatures over the Earth is represented in map by isotherm lines.
      (d) Winds: Uneven beating of air as a cause of winds. Relation to rainfall.
      (e) Weather: Simple explanation of changes as they occur. (Secure from weather bureau station daily weather map for this grade.)
   6. The Ocean:
      Ocean currents. Relation of wind to waves and to ocean currents.
   7. Land Forms:
      (a) Teach by observation after rain storms the formation of gullies on the hillsides in school neighborhood. Observe shapes of valleys in beginning of erosion, formation of falls, rapids and lakes in course of stream.

(b) Observe banks along streams and excavations to find how rocks have been smoothed. Teach the effects of glaciation to land forms.

Now that the explanatory stage of the Geography work has been reached and the principles of Geography have been studied, the child is encouraged and trained to make investigations and solve problems of how and why certain results are produced. The advanced text furnishes subject matter from which problems can be formulated.

The material furnished in the text will serve as a means towards arousing interest for the questioning mind of the child. This subject matter should be supplemented with current events of the world at large. Daily newspapers and magazines of current topics are as important in the hands of the child in these grades as is the textbook.

II. Study of the Continents. This phase of the work will demand:
- (a) A knowledge of map reading and interpretation.
- (b) The making and use of maps of transportation.
- (c) Maps illustrating producing areas and distributing areas.

The Study of the continents in these grades should present each country in its relation to the other. Emphasis is placed on trade and commerce, showing effect of the activities of each continent upon the life and activities of other continents. A knowledge of the continent as a whole is gained by studying the great industries of the country.

The following outline is suggested for use in the presentation of a detailed study of the continent:

I. Early History.

II. Position.
1. Hemisphere, zone.
2. Shape, general. Definite as determined by indentations.
3. Progressive map, outline, made to scale and as Subject Matter of the continent progresses relief and product maps should be made.
4. Camparative Size.

III. Surface:
1. Highlands.
   - (a) Mountain systems, ranges, peaks, heights, volcanoes.
   - (b) Plateaus.
2. Lowlands. Make relief map.

IV. Drainage.

V. Climate.

VI. Political Divisions, named in order, Capitals, Principal towns.

VII. Natural Divisions.

VIII. Life.
1. Vegetable.
2. Animal.
3. Life of Man.
   - (a) Races, appearance, modes of life.
   - (b) Population.
   - (c) Occupation.
   - (d) Manners and customs, kinds of homes.
   - (e) Education.
   - (f) Religion.
   - (g) Government.

IX. Industries of Man.

X. Commerce. Kinds of trade.
(a) Domestic.
(b) Foreign. Imports; duties; Exports.

XI. Means of Transportation. Trades routes.

XII. Comparisons throughout as a means of summary.

In the study of the continents in these grades every effort should be made to have the pupils gain a working knowledge of the physical, industrial, commercial and descriptive aspect of the different countries. The continents are grouped for the Sixth Grade as follows: North America, South America, and Europe, with special reference to Europe.

For the Seventh Grade as follows: Asia, Africa, and Australia. Africa and Australia studied as the colonizing ground for European people in the main.

Special reference and emphasis is placed on the essential facts of each continent:

North America:
Leading industries, where centered, why.
Influence of industries on distribution of population.
Chief transportation routes.
Influence of climate and surface on industries and life.
Location of chief Trade Centers and important cities.
Effects on world trade following the opening of Panama Canal.

South America:
Panama receives special attention as a connecting interest.
North and South America.
Comparison between plain of Argentina with cattle and sheep ranches and the Great Plains of United States with wheat fields, railways, trade centers and foreign trade.

Europe:
The study of this continent to be correlated with the History course of the grade. Size, smallest of all continents but one. Compared with United States. Importance in proportion to size.
Comparison with North America.
Great extent of productive areas.
Countries.

Asia:
Rebirth of continent of Asia into world affairs. Nature and resources of countries of the continent.
Industries of the People.
Distribution of population.
Introduction of modern schools in this country.
Establishment of railroads, steamship and telegraph.
Leading trade centers and cities.

Africa:
Retarded development.—Reasons. Make comparisons as to location, coast line, number of harbors.
Surface as a barrier to exploration.
Compare ease of entrance of this continent to South America by Amazon, Europe by Danube, North America by Mississippi.
Characteristics of rivers as effecting development of country.

Australia:

Vegetation compared to other countries of similar location.
Industries, wool production, mining activities.
European Colonies.

At the close of the presentation of subject matter for these two grades a comparative study is made of the great commercial nations of the world and of the place that the United States holds among these nations.

REFERENCES:

National Geographic Magazine.
Journal of Geography.
World's Work.
Government Publications. Department of Labor.
United States Geological Survey.
Special Method in Geography.—McMurry.
Geographic Studies.—Ritter.

LANGUAGE LESSONS AND COMPOSITION

By Professors S. V. Sanford and P. F. Brown.

First Grade.

I. Aims: 1. To store child's memory with treasures of poetry and prose, the beautiful expressions of beautiful thoughts.

2. To develop his imagination by the frequent repetition and discussion of stories.

3. To train him in the art of speaking clearly and interestingly on a variety of subjects.

4. To begin his education in the art of composition, both on oral and written.

II. Means: 1. There must be a daily language lesson. One period should be reserved every day for this, and the class should be told the day before what the subject is to be.

2. There are five fields of interest in the ordinary child's life from which subjects for oral and written composition may be obtained: (1) Literature, (2) Nature Study, (3) Art, (4) Child Life, (5) Community Activities and Problems.

3. (1) The literature for the first grade should consist of: (a) Short poems to be memorized. These must be simple poems on nature and child life from the child's viewpoint. (b) Interesting stories of a highly imaginative type, such as Aesop's Fables, Scudder's Folk-lore and Fairy Tales, Joel Chandler Harris's Nights With Uncle Remus. (2) Nature studies for this grade should be: (a) Animals that are used for pets, the cat, the rabbit, the dog, white mice, squirrels, chickens, and pigeons. (b) Flowers. (c) Trees. (3) Pictures should be used as observation lessons and subjects for conversation and written exercises. (4) The home duties and pleasures of the children, their playground sports and games, the circus, the fair, the picnic, and the party are all interesting subjects of this class. (5) Such community activities as center about the farm, the store, the blacksmith shop, the mill, the new building, the shoemaker, the cotton gin, the factory, the railroad station, keeping the street clean, the water supply, the beautifying of the school grounds, furnish excellent subjects.

III. Methods: The little child must be taught language unconsciously. The teacher should be the listener and director of his flow of expressions. It is her duty: (1) To suggest the subject, present it in

an attractive way, and arouse the interest of every pupil; (2) To see that every child has full opportunity to express his thoughts on this subject. (3) Drill and language games should be used frequently to teach the correct use of: *I am, you are, he or she is, they are, have* and *has, sit* and *set, lay* and *lie, saw* and *seen, did* and *done, I* and *me, he* and *him, she* and *her, who* and *whom.* (4) Written composition should begin the latter part of this year. Pupils should be sent to the blackboard to write sentences expressing thoughts about the subject that is being discussed. A group of such sentences may be copied from the board by pupils as busy work. This involves the teaching of the use of the capital for beginning a sentence and of the period for ending a written statement.

SECOND GRADE.

Oral Composition.

I. Aims: 1. To insist more upon the orderly arrangement of thoughts, leading to the building of the short paragraph.

2. To cultivate a keen sense for correct English, for exact pronunciation, and clear enunciation in oral expression.

3. To write statements and questions with due regard to capitals and punctuation. Longer sentences should be used than in the first grade.

II. Means: The same five fields for subjects will serve this grade as the last.

1. Literature—Second grade children are still in the highly imaginative state of mind in which you found the first grade. This is the transitional stage between infancy and young childhood. Therefore, the child's mind should not be taxed by hard tasks. All new subjects should be presented by object lessons. He sees in imagination large figures. He enjoys stories about giants, monsters, dwarfs, dragons, and other figures from mythology. Use the stories of Samson, David and Goliath, Daniel, and Jonah from the Bible; of Hercules, Perseus, Theseus, Jason, and Belleroplion from Greek mythology; and of the Norse gods and heroes of Beowulf and Gulliver from English literature; and of Hiawatha from American literature. Continue the memorizing of poems from the school readers.

2. Nature Study—The birds common in your community form the most interesting study for this grade. Teach the pupils to know these by sight. Have them study the habits of such birds as the blue-jay, woodpecker, dove, partridge, and sparrow; how they get their food, build their nest, feed their young, and where they spend their winter. The common wild flowers and a few of the weeds should be identified. The trees should be known by their leaves, and their fruits should be studied in the autumn. The large domestic animals, such as the cow, the horse, the mule, the pig, the goat, and the sheep, will each furnish a lesson. The habits and uses of these animals should be discussed. Seeds should be planted where their germination may be observed and their growth noted.

The ways of planting and cultivating the most important crop may be discussed.

3. Art—Continue the use of pictures, having pupils not only describe but explain the meaning of the picture, make stories about it, and even dramatize its scene, if it contains sufficient action.

4. Child Life—Have explanations and illustrations of children's games given. Have reports of all children's entertainments in the community made as well as of unusual occurrences affecting the children's lives.

5. Community Activities—Use the same subject as in the first grade, getting more details in the reports. Sunday school and church services may be reported upon and discussed. Thanksgiving, Christmas, Memorial Day, and other holidays are excellent subjects for discussion.

III. Methods: 1. Every new subject should, if possible, be presented objectively.

2. Pupils in this grade should be required to follow a definite plan in observation and discussion.

3. Stories must still be told by the teacher, as the pupils have not overcome the mechanical difficulties of reading sufficiently to read to themselves with pleasure. After telling the class a story have each pupil repeat it to the class from day to day until they grow tired of it. Have it discussed and dramatized and played. Have pupils draw pictures illustrating the story.

4. The class should be drilled for a few minutes each day in memorizing simple poetry and prose. The meaning of the selection should be thoroughly understood by the pupils before they are required to memorize it. They should be allowed to repeat it in concert until it is memorized, and then every child should be called upon to repeat it alone. Do not allow sing-song repetition of poetry.

WRITTEN COMPOSITION.

Begin written composition systematically in this grade, observing the following principles:

1. Every subject should be discussed orally by the class until it is thoroughly understood by every pupil before it is written upon.

2. The subject to be written upon must be so limited that the composition, may cover less than a page of theme paper. For instance, if the subject, *The Circus,* has been discussed, a title such as *The Cage of Monkeys* may be written upon.

3. Difficult words should be written upon the board before the pupils begin to write.

4. Before the first composition is written many sentences on the subject should be written on the board. The pupils should be shown how to arrange these in their logical order and make a well connected paragraph.

5. The written work of pupils should be supervised as they write, and should errors escape detection, they should be marked later by the teacher

as she reads the paper, then placed upon the board and corrected orally by class.

6. Badly written papers should be written over by the pupils and all corrections made.

TECHNICAL MATTERS.

I. Capitals: (1) For beginning a sentence. (2) I and O. (3) Proper names and initials of these.

II. Punctuation: (1) Period at end of a statement. (2) Question mark after a question.

III. Copying and Dictation: (1) Simple sentences copied from the board and written from dictation. (2) Names of persons with their initials copied until they can be written without a model.

THIRD GRADE.

Oral Composition.

I. Aims: These are the same as in the first and second grades. Pay more attention to minor details in explanation and description.

II. Means: (1) The stories for this grade should be taken largely from the myths and folk-lore of ancient nations. The Old Testament stories of Garden of Eden, the Flood, Joseph, Moses, Samuel, David, Elijah, Elisha, Job, Ruth and Daniel; the Greek myths; stories from Roman history; Robinson Crusoe, the entire story being worked out by questions by the teacher and suggestions by the pupils. (2) Longer poems may be used for memorizing. Teach one stanza at a time. (3) Nature studies may be extended to the explanation of such processes as (a) How wild animals make their homes (b) How birds build their nests, (c) How men build houses and raise crops. (4) Pictures of landscapes may be used as subjects for lessons in description. (5) More complicated games and occupations of children may be chosen for explanation. (6) Campaigns and drives in the community for patriotic purposes, thrift lessons, and church revivals may be included among the activities discussed.

III. Methods: (1) Continue telling the stories to the class. The steps in handling a story as language lesson material are these: (1) The teacher tells the story to the class in an animated way, making scenes, characters and incidents vivid. (2) One pupil after another repeats the story to the class. (3) As soon as they begin to tire of hearing it, the teacher should ask questions about the story, beginning most of her questions with *Why?* (4) The children dramatize and play the story. (5) They make and draw objects and people mentioned in the story. (6) They write sentences about the story on the board and later copy these on paper. (7) They write a short composition on a topic suggested by the story; for instance, How Robinson Crusoe made candles. (2) Nature study lessons should always begin with a close personal observation of the object. (3) Pictures may be studied silently by the

pupils. Each pupil may be required to tell what he sees in the picture. Stories may be made about the picture. Explanations may be given of what the picture shows. (4) Each pupil may explain a favorite game or home task or preparation of some lesson. Teacher and pupils may ask questions of this pupil. (5) Assign an observation lesson on some activity like the building of a new house.

WRITTEN COMPOSITION.

Follow the suggestions given for the second grade. Choose subjects for written compositions from the oral discussions. Limit each subject to such a narrow field that it may be discussed by the child in two short paragraphs. Show him how to build these paragraphs. If the subject is "How Robinson Crusoe Made Candles," have one pupil at a time make a sentence about it. Write these sentences on the board. Arrange them properly in two paragraphs, one telling where Crusoe obtained materials, and the other telling how he made the candles. Have the pupils copy these paragraphs. Next day have them write two paragraphs on a similar subject, such as, How Father Milks the Cow. Correct these papers and have pupils copy them.

TECHNICAL MATTERS.

By using dictation exercises, continue to drill pupils on writing sentences correctly, using capitals for the first word and I and O, and using the period and question mark. Teach use of capitals for titles of compositions and for proper names. Teach use of period for abbreviations and apostrophe for possessives and contractions, such as I've, you've, isn't, hasn't, haven't. Teach every child to write his own name and address.

FOURTH GRADE.

Composition.

I. Aims: 1. To teach the appreciation and understanding of good literature and pictures by studying from a textbook.

2. To teach the use of the dictionary and its value as an aid to correct expression.

3. To teach the plans upon which stories and poems are built and to train the pupil in the making of well constructed stories.

4. To teach the meaning of the terms *sentence, statement, question, command, exclamation, contraction, abbreviation, paragraph, the letter, titles of persons, titles of compositions,* and the proper writing of these.

5. To teach the writing of friendly and business letters.

6. To teach the difference between stories and descriptions and the writing of each.

II. Means: 1. The use of Book I of Modern Course in English, Part I.

2. Supplementing the use of the text with entertaining stories, interesting nature studies, and discussions of problems from home, school, and community life.

Stories especially suited for this grade are:

(1) King Arthur and the Knights of the Round Table.

(2) The Robin Hood stories.

(3) Scudder's Legends of the Middle Ages.

(4) Tales from Spenser's Fairie Queene.

III. Methods: The contents of the textbook may be classied as follows: (1) The study of poems. The teacher should read the poem aloud, the pupils looking on their books. Every unusual word should be explained by pupils or teacher. The teacher should then read the poem again, a stanza at a time, and have some pupil explain each stanza. Pupils should be encouraged to express any thoughts suggested by the poem. The poem, if not too long, should gradually be memorized by the class. (2) The study of pictures. Sufficient directions for this have been given in the work of the lower grades. Supplement the questions in the text by questions of your own. (3) Dictionary lessons. Make a game out of these. Place a word on the board. Have pupils find the word in their dictionaries. The pupil who finds it first raises his hand. He reads the definition to the class and makes a sentence using the word. Place his name on the board with a mark after it. The pupil who gets the most marks wins the game. (4) Story telling. The first story should be used for studying the meaning and for oral reproduction. The second story is for these two purposes, but also for division into its parts, or paragraphs, and the making of a title for each part, as on page 23. The fourth is for telling a story from its outline. The fifth is for reconstructing a story by changing the point of view, as on page 40. The sixth is for studying the meaning and lesson of a story, as on page 49. The seventh story is given for paragraph study. In the succeeding stories all these uses are reviewed, and finally in Lesson 64 the pupils are taught to write an original story, which is the end sought. (5) Technical Grammar. This begins in Lesson 8 with the study of sentences. Use the inductive method in teaching such lessons. Place the sentences at the top of the lesson on the blackboard and have pupils tell why each is a sentence. Have pupils write all suggested exercises on the blackboard. (6) Word studies. These are given for the purpose of drilling the pupils in the correct forms of speech. The proper uses of *am, is* and *are* are taught in lesson 15. (7) Punctuation. This should be taught as the pupils need it in their written work. Under contractions teach the use of the apostrophe. (8) Capital letters. The uses of these are taught just as punctuation is. (9) The Paragraph. The steps in teaching the paragraph are: (a) Observation of paragraphs in the book to learn their appearance on the page. (b) Writing paragraphs from topic sentences as on page 57. (c) Learning the definition and structure of a paragraph, as on page 64. (e) Dividing into paragraphs an undivided article as on page 86. (10) Letter writing. This is taught: (a) By studying a

good model, as on page 65. (b) By practicing writing different parts of a letter, as on page 66. (c) By studying the contents of famous letters in order that the child may acquire by imitation a good vocabulary and know what things to put into a good letter. (d) By writing a short letter from dictation in order to acquire correct form and punctuation. (12) Description. The child must first know what description means. He is taught this in lesson 69. (13) Nature study as a subject for composition is taught: (a) By an interesting story in lesson 92. (b) By a poem in lesson 99, the study being in the form of a poem. (c) By an interesting article on Grasses on page 155, and by two beautiful poems on the same subject in the next two lessons. (14) The year's work closes with a thorough review of all technical matters taught. Have pupils learn well pages 168-169-170.

FIFTH GRADE.

Composition.

I. Aims: 1. To continue filling their memories with beautiful poems and stories and cultivate a taste for good literature.

2. To perfect pupils in the art of letter writing. Insist upon clearness of expresson and orderliness of arrangement. Look closely after matters of captalization and punctuation.

3. To teach some of the fundamental principles of English Grammar.

4. To teach the writing of stories, descriptions, explanations, business and social forms.

II. Means: 1. Follow the lessons in Part II of Book I, Modern Course in English, as a guide for composition, language drill, and grammar.

2. Supplement the stories in the text with history stories and stories from literature. Good pieces of literature for this grade are: Goulding's "Young Marooners," Wyss's "Swiss Family Robinson," Ruskin's "King of the Golden River," Mulock's "The Little Lame Prince," and Page's "Two Little Confederates." A sufficient number and variety of poems for memorizing will be found in the textbook.

III. Methods: The term's work opens in the textbook with a picture study, "Autumn." Treat this more thoroughly than is done in the text. Have discussion by the class of autumn crops and their harvesting, autumn fruits and their uses, autumn as a season of preparation for winter. Have a written composition on one of these subjects. The purpose of the story-lesson, "Eyes and No Eyes,' is to stimulate the pupils' powers of observation outside of school hours and report on them at the English period. The Diary in lesson 5 is to be treated as a form of story writing. Every pupil should be encouraged to keep a diary, and some of these might be read to the class by the writers Friday afternoons. Another form of story, the autobiography, is suggested in lesson 7. The pupils should be shown how to arrange the facts of their own lives into an interesting narrative and make a written composition lesson out of

this. The study of the sentence is taken up in a formal way for the first time in lesson 9.

Be careful in teaching the five parts of a busness letter, the proper position and punctuation of every part. Do not allow pupils to place commas at the ends of lines in the heading, address, or salutation of a business letter, or at the ends of lines on the envelope. Insist upon clearness and conciseness, or brevity, in a business letter.

The work in formation of the plurals of nouns should be carried on like a written spelling lesson. Make lists of nouns illustrating all the rules, and have the class write these from dictation. Many of the word studies, such as the one on page 218, should be used as dictation lessons.

The lessons on Nature Study given in the text should be accompanied by the actual study of the plants, animals, and insects.

WRITTEN COMPOSITION.

A written composition should be handed in by this grade about once every two weeks. The teacher should read these papers carefully and mark (not correct) every error in spelling, capitalization, punctuation, grammar, choice of words, and sentence construction. Here is a simple code for marking errors:

The two boys went sepeate ways.—Spelling.
The largest City in georgia is atlanta.—Capitals.
Mary where have you been —Punctuation.
There √aint √no apples on the tree.—Grammar.
The [gents] all wore ragged [pants].—Diction.
(Where the ball strck him was a bruise).—Sentence.
The eagle is v national bird.—Omission.
The girl returned back home.—To be omitted.

SIXTH GRADE.

Composition.

I. Aims: 1. To teach a knowledge and appreciation of the differences in purpose and construction among the three forms of composition taught in the lower grades: Stories, descriptions, and explanations, and to help the pupils by frequent practice to acquire skill in the construction of these.

2. To drill upon the building of sentences and paragraphs, and the combining of these into well made compositions.

3. To teach the principles of grammar as the pupils need this knowledge for guidance in oral and written expressions.

II. Means: 1. The use of the lessons in Part I of Book II, Modern Course in English in combination with those of Part II, so that the pupils may obtain the information on the principles of grammar that they will need to guide them in constructing the sentences in their composition.

2. The study of literary classics suitable for children of this age. These should be divided into three classes: (1) Story books to be read outside of class and reported upon to the class; (2) Stories to be studied

in the classroom under the direction of the teacher; (3) Poems to be memorized.

OUTSIDE READING.

(1) Treasure Island.—R. L. Stevenson.
(2) The Adventures of Tom Sawyer.—Mark Twain.
(3) Little Women.—Louisa M. Alcott.
(4) A Man Without a Country.—E. E. Hale.
(5) Scottish Chiefs.—Jane Porter.
(6) Tom Brown's School Days.—Hughes.

FOR CAREFUL STUDY.

(1) Tales of a Wayside Inn.—Longfellow.
(2) The Prisoner of Chillon; Mazeppa.—Byron.
(3) Tales of a Traveller.—Irving.
(4) Autobiography.—Franklin.
(5) Lays of Ancient Rome.—Macauley.
(6) Selected Poems and Tales.—Poe.

FOR MEMORIZING.

(1) The Children's Hour.—Longfellow.
(2) Concord Hymn.—Emerson.
(3) Annabel Lee.—Poe.
(4) A Day in June.—Lowell.
(5) The Bivouac of the Dead.—O'Hara.
(6) The Song of the Chattahoochee.—Lanier.
(7) Lochinvar.—Scott.

III. Methods: Book II of the Modern Course in English is a guide for the study of the two closely related subjects of Composition and Grammar. The lessons in grammar, therefore, in Part II should be studied by the pupils as they are needed in doing the composition work suggested in Part I. The following suggestions have for their main purpose the directing of the teacher in the use of the two parts in conjunction. Most of the composition lessons contain too much work for one day. Some of them provide enough work for a week. Lesson I should be studied first as an exercise in story-telling. The second day the story may be repeated by several pulpils, one at a time. The meaning of *composition* should be discussed, and the story shown to be a composition. The third day the class may tell original stories as suggested in Exercise 2. The fourth day lesson 2 may be taken up for the purpose of understanding and illustrating oral composition. At least two days should be spent on this, largely in the making of oral compositions on subjects taken from other studies, such as history, geography, and physiology. The next lesson should be on the form of the written composition. The teacher should illustrate this on the blackboard and have the pupils copy on paper, applying the rules on page 5. The next day an original written composition should be produced. The following day should be taken by the teacher for oral criticism of these papers, typical errors being placed on the board and corrected by the class. The next day the pupils should copy the composition into notebooks, making all the corrections

indicated. The lesson on the use of the dictionary should occupy two days, one for learning how to look up words, the other for rapid practice in a dictionary game. Then follow six lessons on sentences, their uses, and their proper constructions for clearness. Give abundant blackboard work to drill pupils in the making of good sentences. Always conduct a grammar lesson as you would an arithmetic lesson. Send pupils to the board to do the exercises suggested, and have others criticise and correct their work.

LITERATURE

The pupils should be required to memorize one stanza of a poem every day. Place this stanza on the board and have the class repeat it in concert until they know it. Add a stanza each day until the whole poem is memorized. Assign a story to a pupil to be read at home. Require him to make an outline and to tell this story to the class by referring to his outline. Give one period a week to this work.

TECHNICAL MATTERS.

The adopted textbooks in English use the uniform nomenclature recommended by the National Educational Association several years ago and widely used in the schools and textbooks of this country. According to this nomenclature, the purpose of which is to unify all language teaching and to supply the student with a set of terms which will serve him when studying Greek, Latin, French, Spanish, and Italian, as well as English. Clauses are classified in lesson 56 as Principal and Subordinate, not as Independent and Dependent. In lesson 63, "Indeterminate Gender" is a more accurate term than "Common Gender," as it means that the sex of the person or animal named is not denoted by the form of its name. In lesson 64, the term *Genitive* takes the place of *Possessive* for reasons given on page 107. The *Dative Case* has been brought back into our grammar to indicate the use of the noun or pronoun that precedes the direct object after a verb of giving; as, I gave my *friend* a book. Accusative has replaced *Objective* simply for purposes of uniformity. The uses of the accusative are to be more thoroughly taught in the 7th grade. In the classification of pronouns, confusion arises in the minds of some over the forms *my* and *mine, thy* and *thine, yours* and *your, his, her,* and *hers, its, our* and *ours, their* and *theirs,* and *whose.* If any of these forms immediately precede or follow a noun which they modify, they are not pronouns, but adjectives, for only adjectives modify nouns. In the expressions *my* book, *your* doll, *his* ink, *her* dress, *our* house, *their* dog, the italicized words are adjectives. When one of these forms is used as a substitute for a noun, as my book is lost, but I have *yours,* it is a pronoun. Generally the forms *mine, thine, hers, yours, ours* and *theirs* are used as pronouns, but in expressions like "daughter *mine*" they are adjectives; and when connected by a linking verb to the subject which they modify, they are adjectives; as, This book is *mine.* The word *what* is rarely a relative

pronoun. Only when *what* has an antecedent expressed in the sentence is it a relative pronoun; as, *What* you command, that I will do. The antecedent of *what* is *that.* Usually *what* is either an interrogative pronoun or an indefinite pronoun. "I asked you *what* you said." Here *what* is an interrogative pronoun, introducing the indirect question, "*What* you said." "I did *what* you told me." Here *what* is an indefinite pronoun, representing the unnamed thing which you told me to do. Personal and relative pronouns have only two case forms, the *Nominative* and the *Dative Accusative,* so-called from their uses in the sentences. Adjectives occupy three positions in regard to the nouns which they modify: (1)) The adherent position is immediately before the noun; as, *The blind* singer entranced us. The *appositive* position is immediately after the modified noun; as, The singer, *poor* and *blind,* touched our hearts. The predicative position is after a linking verb; as, The singer was *poor* and *blind.*

SEVENTH GRADE.

Composition.

I. Aims: 1. To prepare children for efficiency in business and social life by cultivating habits of correct and effective speech.

2. To increase their general culture by broadening their knowledge of literature and creating in them an appreciation of the good and a distaste for the poor and bad.

3. To make correct, accurate, and attractive speakers and writers.

II. Means: 1. A use of the parts of Book II of Modern Course in English not used in the sixth grade, beginning the composition work with business letters on page 41 and the grammar with the Verbs on page 144.

2. The teaching of the following literature:

FOR OUTSIDE READING.

(1) A Dog of Flanders.—
(2) Rab and His Friends.—Brown.
(3) The Yemassee.—Sims.
(4) Huckleberry Finn.—Mark Twain.
(5) Little Men.—Alcott.
(6) The Siege of Leyden.—Motley.

FOR CAREFUL STUDY.

(1) Evangeline.—Longfellow.
(2) The Last of the Mohicans.—Cooper.
(3) Pilgrim's Progress.—Bunyan.
(4) The Sketch Book.—Irving.
(5) The Vision of Sir Launfal.—Lowell.

FOR MEMORIZING.

(1) The Chambered Nautilus.Holmes.
(2) Abou Ben Adhem.—Hunt.
(3) The Recessional.—Kipling.

(4) Crossing the Bar.—Tennyson.
(5) Thanatopsis.—Bryant.
(6) O Captain, My Captain.—Whitman.
(7) The Quality of Mercy.—Shakespeare.

III. Methods in Composition and Grammar: 1. Begin the term's work with the study of the form, style, and contents of business letters, as taught in Lesson 26. Have the pupils write a business letter, criticise it, and have them copy it. Take up the study of the verb in Lesson 80. Teach the three classes given in Lesson 81, and drill on the recognition of these in Exercise 167 and their use in Exercise 168. Teach Voice, Mood, Tense, Number, and Person in successive lessons. Now have another written composition lesson, preceded by a study of the application in Lesson 27. Next teach the classification of the verb as Predicative and Non-Predicative and the three forms of the latter, the Infinitive, the Gerund, and the Participle. Teach Lesson 28. A Letter of Recommendation and use the exercise as written composition. Next teach Regular and Irregular Verbs, Notional and Auxiliary verbs, and Defective verbs. Give the class another letter writing lesson, based on the Letter of Introduction, Lesson 29. Next teach the Conjugation of verbs in Lessons 93-95. Next use Lesson 30, and have an order for goods written. Take up now the parsing of verbs, Lesson 96, and drill on this until the class can parse well all the parts of speech studied thus far. Use Advertisements and Answers as the next composition study. Now study the Adverb in Lesson 97-100.. Teach Lesson 32 with its exercise; then the other parts of speech in Lessons 101-105. Teach Lessons 33 and 34 together for comparison of the two kinds of notes and give abundant blackboard practice. Alternate the compositions lessons in the rest of Part I with groups of grammar lessons in Part III until you finish the book.

Have a literature lesson from Home Reading once a week, a class study of a classic daily if possible, and devote a few minutes every day to the memorizing of a poem. Frequently review the poems already learned.

IV. Technical Matters:

The *linking verb* is the old copulative verb. It is intransitive; that is, it does not admit of a direct object after it. The *complete verb* is also intransitive.

In teaching the subjunctive mood distinguish between the *subjunctive of volition,* which expresses the determination of the speaker that some act be performed, and the *subjunctive of wish,* which expresses merely a desire.

Two new tenses, the *past future* and the *past future perfect* have been added by the new nomenclature. These explain the ordinary uses of the auxiliaries *should* and *would,* which are the past tenses of *shall* and *will,* the *signs* of the future tense.

The terms *predicative* and *non-predicative* are the same as *finite* and *non-finite,* or *modal* and *non-modal.* Every predicate verb of a sentence or clause is predicative, every verb used otherwise is non-predicative.

The suffix *ing* belongs alike to the gerund and the present participle. A word ending in *ing* is a gerund only when it is used as noun and verb at the same time; as, *Selling* peanuts was his occupation. *Selling* is a noun because it is the subject substantive of was; *selling* is a verb because it has the direct object *peanuts.* A word ending in *ing* is a participle when it is used as an adjective and a verb at the same time; as, The boy *selling* peanuts is my son. *Selling* is an adjective describing the boy; it is also a verb, having the direct object *peanuts.*

Regular and irregular verbs are best taught by exercises like 183.

The notional verb is sometimes called the principal verb in a verb phrase to distinguish it from the auxiliary verb.

V. Diagramming:

In Part III the diagram may be made a great aid in teaching analysis. As soon as you think the pupils recognize the parts of speech and the elements of a sentence readily, no longer require them to mark the words (a) for adjective, (v) for verb, etc. Some of the terms in analysis may be new to you. An adjective equivalent is a noun in the genitive case, or an appositive noun, or a phrase, or clause, or infinitive, or participle or a pronoun. The predicate nominative means the same as predicate noun, attribute complement, or subjective complement. The adjunct accusative means the same as objective complement. Be certain your pupils get clearly in mind the function of each element.

HISTORY

BY PRESIDENT J. M. POUND AND H. D. MEYER, State Normal School.

I. INTRODUCTION.

Education is character building. A study of the men and women who have made the present what it is by their deeds in the past offers splendid opportunity for the development of the fundamentals of Citizenship and Americanization. Teaching patriotism, a sense of brotherhood, a devotion to law and order, a harmony of all the good elements of citizenship in the "citizen of the future," should be among the chief aims of the teacher of History. The teacher of History has a fertile field in which to sow the seeds of citizenship and character in the boys and girls under her guardianship. The emphasis of History is continually changing. The teacher will be the judge of this emphasis and teach accordingly.

This chapter will follow the general outline given below:

I. INTRODUCTION

II. MATERIALS AND SUBJECT MATTER.
   1. Course of Study.
   2. A Lesson Plan.
   3. Two Topical Outlines.
   4. Methods of Recitation.
   5. Local History.
   6. Correlated Subjects.

III. METHODS AND DEVICES.
   1. Use of Maps.
   2. Use of Pictures.
   3. Use of Relics.
   4. Dramatization.—Pageant.
   5. Helps and Devices.

IV. SPECIAL PHASES.
   1. Time element in History.
   2. Biographies.
   3. Dates.
   4. Text-Book Requirements and Assignments.
   5. Note-Book Work.
   6. Current Events.

V. LIST OF BOOKS FOR REFERENCE AND SUPPLEMENTARY READING.
   1. Listed by Grades.

II. MATERIALS AND SUBJECT MATTER.

1. Course of Study.

Note—The emphasis of history is changing, therefore any course of study is tentative.

Note—It will be well for the teacher to read thoroughly the Introduction to the various texts. The writer always makes the aim of his book clear and generally offers some good advice in methods of instruction.

Note—Georgia History has not been given a fixed place in the course of study. It is suggested that the teacher use Georgia History whenever and wherever it is possible. Require the pupils of the Fifth, Sixth and Seventh Grades to possess a text on Georgia History. Brooks—History of Georgia, or Evans—First Lessons in Georgia History are splendid texts. Follow the text closely with the required text. For example; if the lesson is on Indians study the Indians of Georgia as well as what is stated in the required text. If the lesson is on colonization make a definite and lengthy study of the settlement of Georgia. If the lesson is on the World War emphasize the part played by Georgia. It is believed that this method will be of the greatest advantage to the pupil.

First Grade.

A study of the pupils' homes and home life.
Home of common birds and animals—this is in line with the study of the home as a study of the pets found about the home.
Indian Life—Study their type, manners, customs, etc.
The Indians of Georgia—Localize the study as far as possible.
Pilgrims and Thanksgiving.
The early settlers of Georgia.
The story of Christ and Christmas.
The Life of Lee—Celebrate Birthday—Also study some characters in Georgia History having the general character of Lee.
Life of Washington—Celebrate Birthday.
A study of the American Flag.
Georgia Day—Celebrate Birthday.
A study of the Georgia Flag.
Continue the study of home life.
(The Eskimos and Dutch may be studied as comparative types.)

Second Grade.

Primitive Life.
Tree Dwellers.
Early Cave Men.
Columbus Day.
Indians.
Thanksgiving.
Puritans.

Christmas.
Lee's Birthday.
Georgia Day.
Washington's Birthday.
Shepherd Life.
Bible Stories.

Third Grade.

A survey of the races worked out from the standpoint of child-life. Study the different types of people and make comparisons. Study their different customs, manners, modes of dress, ways of living, etc.

The salient features—Food, shelter and clothing are studied in relation to climate, surface and rainfall.

The text used in this class is "Big People and Little People of Other Lands."—Shaw.

Note—In the preceding grades the chief aim is to establish and create an atmosphere and a general love for History.

Fourth Grade.

A study of the settlement of America.

Spanish, English, Dutch and French colonies are studied as types.

The Mother Country of each is carefully investigated.

The adaptation of the colonists to conditions of the new country is stressed.

Note—Here we would place special emphasis on Georgia. Make an elementary study of her settlement—early settlers—relation of colonist to Mother country, etc.

The text of this grade is, "Early Colonies of America," by Pratt.

A splendid opportunity for correlation is offered. The geographical features of the different settlements are obtained by a study of Geography—Frye's "New Geography."

Fifth Grade.

Note—As this is the first grade in which a real study of the text is begun, it is well to teach the class how to study a History Lesson. The following suggestions are not to be memorized by the pupil, but should become fixed habits through constant and supervised use.

1. Necessary materials for study—Paper, pencil, a geography, and as many texts as possible.
2. Be sure of the assignment—number of pages to study and where the lesson is to be found in the text. What is to be done and when the lesson is to be recited.
3. Read the lesson as a whole to get the main subject and main topic.
4. Locate each event or place—drawing a rough sketch when necessary.

5. Compare or supplement topics discussed with present similar events or experiences.
6. Read each paragraph and get main thought in outline.
7. Try to recite the lesson from the outline that is made.
8. Make a list of questions suggested by the lesson which you would like to have answered.

It is vitally important to Educational Advancement that the pupil KNOW HOW to study.

All time that is spent in teaching how to study is time well spent.

Fifth Grade.

Period of Discovery—a study of the Explorers and the lands explored. Some of the chief explorers are—Cabots, Magellan, DeSoto, LaSalle, Cortez, Ponce de Leon, etc.

Period of Colonization—a study of the settlement, settlers and their new relations. Virginia—John Smith. New York—Hudson. Georgia—Oglethorpe.

Period of the Revolution—the causes, battles, leaders and results.

The New Nation — George Washington — Thomas Jefferson — Lewis and Clarke—George Roger Clarke—Andrew Jackson — Abraham Lincoln — Robert E. Lee—Fulton—Morse—Edison and others. A study of character.

The text used is—Primary History—by Mace.

Sixth Grade.

Note—Here the foundation for a study of other nations is made.

It will be found profitable to link present events with the study. Give special emphasis on the Countries of the World War. Study the nations that were with the Allies and those of the Central Powers group. Study the new relationship of nations.

The Greeks—as builders and artists, their religion, how they lived.

The Romans—beginning of Rome, their conquests, development of the Republic into the Empire, Julius Caesar, his successors.

The Germans—the kind of people, their conquests, how they learned from Rome.

The English—Alfred the Great, Norman Conquests, King John and the Great Charter, Beginning of Parliament. The towns, village life, the nobles, Feudalism.

The Church in the Middle Ages—Cathedrals, Monasteries.

The Crusades—what they were, Richard the Lion-hearted (a type), results.

Discovery of the Western World—Columbus and his successors.

Exploration of the Western World—Cortez, DeSoto, and others.

European Rivalries—France and Spain in Europe and America. England the rival of Spain in Europe and America. Spain attacked by the Dutch. Englishmen join in fight against Spain. English voyages Westward.

The text used is—"The Story of Old Europe and Young America," by Mace and Tanner.

Seventh Grade.

Note—The Text is "The Essential Facts of American History." —Evans. Since this text is rather long it is suggested that the work of the Seventh Grade begin at the Period of Revolution.

Period of Revolution—Causes, battles and campaigns, leaders, results.

Period of Development—The Constitution, presidential administrations, period develops the history to Andrew Jackson's administration.

Period of Disunion—Causes, battles and campaigns, leaders and results of the War Between the States.

Period of Reunion — Reconstruction, development, progress, a study of the growth of sections, industries, inventions, agriculture, etc.

The World War—Our Country and the New Age.

2. A LESSON PLAN.

Statement—Jefferson, without advice of Congress, bought from France vast amount of land known as the Louisiana Territory.

Problem—Was the Louisiana Purchase justifiable?

1. As a bargain.
2. As a precedent.

SUBJECT MATTER.	PROCEDURE.
I. A Bargain. Definition—A bargain is an exchange satisfactory to both parties.	What do you consider a bargain?
II. Description of Louisiana Territory. a. Location—boundaries. Commercial position. b. Climate—effect on people. c. Resources—mineral, etc. d. A bargain as desirable territory.	Consider the territory in question. How did its location make it of commercial value to the United States? What kind of climate did we find there and what effect did it have on the people? Has the land proved its worth in resources? We now have reasons why it would be an asset to the United States—therefore—was it a bargain?
III. Conditions in France at the time. a. Possession of territory by France. 1. Treaty of Paris. 2. Secret Treaty. b. Fear of England. c. Financial distress of Napoleon. d. A bargain to France.	Consider the state of affairs in France at the time. How did France happen to hold territory? What position did France hold among other nations? How were financial conditions influential? Did these conditions make selling this territory a bargain to France?
IV. State of affairs in the United States. a. Value of bargain to the United States. 1. Warlike attitude of Spanish rulers. 2. Distress of traders in United States. 3. Desire for growth and expansion. 4. Care for welfare of people. Result — Territory absolute necessity.	Give four good reasons for Jefferson's action.
V. Jefferson's action. a. Decision for purchase. 1. Appropriation of two million dollars for New Orleans. b. Negotiations. 1. Livingston. 2. Monroe. c. Agreement on bargain. 1. Fifteen million dollars. d. Contract for thirteen million dollars not in hand for the territory; the annexation of which constitution does not provide.	Before a bargain can be made what provision is necessary? How much money did Jefferson have and for what purpose? Although he lacked thirteen millions, what did he do?
e. Was the purchase justifiable.	In what way was it unconstitutional? Was it justifiable?
Summary.	Summary.

1. France—financial need satisfied.
2. United States—Commercial values obtained. Citizens protected.

Conclusion—The purchase of Louisiana Territory as a bargain was justifiable.

Assignment—Discuss matter from the standpoint of precedent. Compare with the administration of Woodrow Wilson.

3. TOPICAL OUTLINE.

Note—This is merely suggestive of a method and is not to be slavishly followed by teacher.

The first one is about the settlement of Georgia.

Settlement of Georgia.

I. Historical Background of Settlement and of Settlers.
   - A. James Edward Oglethorpe.
   - B. Debtors.
   - C. English Laws.
   - D. Plea for a Colony.

II. The Charter.
   - A. To whom granted.
   - B. When.
   - C. For what length of time.

III. The Grant of Land.
   - A. Where.
   - B. Its limits.

IV. The Sailing.
   - A. Gathering of the Settlers.
   - B. Place of sailing.
   - C. Name of ship—leader—number on ship.
   - D. The voyage.

V. The Landing.
   - A. At Charleston—time, conditions, etc.
   - B. At Yamacraw Bluff—time, conditions, etc.
   - C. Incidents of landing.
   - D. Early experiences of the settlers.

4. METHODS OF RECITATION.

Interest in the subject will depend largely on the type of recitation. Monotony of recitation will destroy the interest quicker than anything else. Try to vary the recitation from day to day. Strive to create interest in the subject matter rather than attempt to cover so much of the text. Have the student enjoy the History period having the lesson taught in various ways. Some suggested methods for a History recitation are given.

1. The fact recitation—asking questions and having answers.
2. Lecture form or story telling.
3. Lesson in correlation—where the topic needs geographical aids correlate the lesson of History with that of Geography.

4. Written Work—have the pupils write the answers to some questions given on the daily recitation or have them write a story about the lesson, etc.
5. Debate Lesson—where some question is offered that may be debated choose sides and have a debate. The assignment for this type of recitation should be made some days ahead of time.
6. Conversation Lesson—this is a socializing exercise—the pupils have a round-table discussion of the lesson, each one giving his thought.
7. Lesson Bee—Choose sides and have the pupils to ask questions. If the question can not be answered by the opposite side the members of that side return to their seats. The teacher must be referee and all questions must be clear, reasonable and definitely answered.
8. Visit historical places relating to the lesson—especially stress the local interest of the place visited.

Originality will add many other methods to this list.

Avoid the paragraph method of teaching History and constant memorizing of the text.

At times have written and oral reviews.

5. LOCAL HISTORY.

Study Georgia — Know your own State — Know your County — Know your Community.

Time spent in teaching Georgia is time well spent.

Whenever and wherever it is possible, drive home to the hearts of our Boys and Girls facts about their Own. Too often we find that the embryo-citizens know more about other lands than they do their own. Georgia is rich in historical resources. Georgia has had a glorious past and the heritage of her citizens is worthy of praise. Know Georgia for her past. Know her for the good you can do. Know Georgia to be able to better serve her in the present and in the future. Know Georgia that you may give to her your best in the future.

Note—(Suggestions have been given as to how it is thought best to teach Georgia History in our schools.)

6. CORRELATION.

One of the best methods of teaching is through Correlation. Many subjects bear a close relationship one to the other. In our elementary grades, especially, we find splendid opportunity for correlation as, for instance:

Correlate History and Reading.

Either supplementary reading is used to throw light on history or historical literature is used for reading matter.

It is easy to make History the Reading lesson.

A good plan is to review all selections of a historical nature in the Reader.

Reading and History may be combined up to the higher grades.
Bring out the history of the selection read and develop historical characters.
Have oral reading during the History recitation.
Use classics and memory gems having an historical bearing.

We may also correlate History and Language.
Oral and written language work may be based on material previously taken as History.
Historical themes, character sketches, biographies, etc., may be used and made a part of the composition work.
Correct English should be insisted upon during the History recitation.
Debate Historical subjects.
Dramatize Historical events.
This type of correlation can be made without any harm to either subject. In fact, History receives direct aid from such work.

We may also correlate History and Geography.
The best method is to parallel subjects in the course of study.
Another method is to give the History of a country preceded by its Geography or the History of a country followed by its Geography.

III. METHODS AND DEVICES.

1. USE OF MAPS.

As a visualizing factor, maps are indispensable for the teaching of History. It is generally agreed that the work is poorly done unless there is constant use of maps. Especially is this true as the work advances.

Advantages:
The pupil is learning location, direction and position.
He localizes the place under discussion and learns better to evaluate claims of parties, warring nations, sections, etc.
Journeys, routes, and various movements are followed.
Marches of armies are traced.
A visual picture of the country is obtained.
A study of the physical features may be made.
Brings events and places into closer relationship.
Emphasizes text and makes it clearer.
The maps are in the textbooks or may be wall maps. It is profitable to have a set of maps for History use. Also, have maps made in class or at home.

2. USE OF PICTURES.

Pictures form another attractive method of visualizing History. Pupils in all the grades enjoy pictures. The teacher will find added interest in the work where pictures are used.

Advantages of use:

Makes the mental picture clearer.
Makes REAL the men—events—places.
Emphasizes persons—places—facts.
Shows battlefields—armies—machinery—etc.
Shows costumes—types of clothing—manners and customs.
Lends correlated interest to art and literature.

Pictorial charts are valuable and should be made by each grade. Select only suitable pictures for the wall.

3. Use of Relics.

Whenever and wherever it is possible to obtain a relic or some interesting object illustrating an historical fact, obtain it and use it. It will make the condition, event, or incident clearer and will add a peculiar local interest in the study. Indian bows and arrows, spinning wheels, weapons, powder horns, individual family relics are valuable aids in teaching History. The relics will add a realness to the lesson that may be obtained in no other way.

4. Use of Dramatization.

This is perhaps one of the most effective ways to teach History. It is just coming into its own and receiving attention due it. The pupil assuming the role of some historical character and acting a scene around which is woven the events of historical interest will never forget those characters and those events. History is full of characters and events for dramatization. Tomochichi, Miles Standish, George Washington, Betsy Ross, Robert E. Lee and Thomas Edison are illustration for character development. The colonization of Virginia, the landing of the Pilgrims, the spirit of seventy-six, making the flag, making the peace treaty, landing of Oglethorpe, life of early settlers, etc., are some of the topics that may be acted. This method will clearly, forcibly, and indelibly plant the character and the event in the hearts and minds of the pupils. Nearly all the stories used in the primary grades may be dramatized. The use of the tableau is suggested. The historical pageant is gradually receiving much attention. It will be well for the teacher to study pageantry and investigate the value of this type of presentation—especially in its educational value to the community.

5. Helps and Devices.

As teachers are not of uniform ability, and further, often lack time to think out and ponder over devices and helps for each subject—a few such suggestions are given. The teacher will adapt the particular help or device to her particular grade or lesson.

a. Have pupils bring books and magazines for pictures and historical topics.

b. Organize reading circles and give them good material for historical advancement.

c. Have debates on historical subjects.
d. Use current events to connect past and present.
e. Bring in a local speaker occasionally—old soldier, pioneer citizen, men and women of talent, persons having visited historical places, veterans of the World War—and have them talk to the pupils.
f. Observe historical days with appropriate exercises.
g. Visit local points of historical value.
h. Where the topic permits and where the song is adapted to the topic—sing.
i. Teacher and pupils impersonate certain characters and act certain parts.
j. When studying men like Washington—Patrick Henry—Wilson, etc., have some pupil memorize all or a part of a notable speech by one of these men and deliver it to the class. Have the class assume the historic assembly to which the speech was delivered.
k. Let the pupil recite on the topic and then if any other student knows other facts about the topic, let the reciting pupil call on him for them.

IV. SPECIAL PHASES.

1. TIME ELEMENT IN HISTORY.

The prevailing tendecy seems to be to give three recitations per week to History in Grades I, II and III, and five recitations per week in Grades IV, V, VI and VII. The tendency might be said to be growing toward giving five periods in all the grades. The recitation period should range from fifteen minutes in the first grade to thirty minutes in the seventh grade. The period should be of sufficient length to do something more than merely test the knowledge of the lesson.

2. BIOGRAPHIES.

The History of an age is largely woven around the life of some great man or woman. As the chief function of History teaching is character building—the teacher can not afford to neglect the great value of biography.

3. DATES.

It is a mistake to force the pupil to remember many dates. There are certain dates that will form the basis for historical study. Such dates as 1607—1776—1861—1918—and a few others must be fixed immovably in mind. The pupil may be required to know the dates for the immediate lesson, but when the review work is taken, the dates should be sifted to a knowledge of only the fundamental ones. Sometimes it is sufficient to remember the general period of time—as, for instance—during the early part of

the seventeenth century or about 1600 or during the last part of the eighteenth century. Only a few of the important dates should be memorizd.

4. THE TEXTBOOK AND THE ASSIGNMENT.

But few teachers below the fifth grade place a textbook in the hands of a pupil. The three higher grades use a textbook. Teaching the pupil how to study the text is the first factor. Have him know the author, read the preface and the introduction. Next get a glimpse of the book as a whole by studying the table of contents. Try to catch the general aim of the author. The teacher should divide the text into the number of recitations for the year. The teacher then gives these assignments to the pupil, and the pupil should be careful to get the proper assignment. Suggest essential topics and give them subtopics to study. Discourage the memorizing of any part of the text. Through constant drills and recitations the essential facts are known, and by reviews these facts are made to contribute to the growth in character. There is one standard for recitations and another for reviews. As the review covers a larger field a sifting of minor facts and insignificant facts should be made. Use the textbook as a guide and a reference. Use it to review logically.

5. NOTEBOOK WORK

There is a wide difference of opinion as to the use of the notebook. The use can be overdone and become a hindrance to proper development. Used in moderation, and especially to utilize the outline and keep the essential facts, the notebook is a splendid aid in teaching. In the lower grades it may be used as a basis for a scrapbook of historical materials. For the higher grades it will be used to contain the outlines and all outside historical materials.

6. CURRENT EVENTS.

There are many ways to bring current events into the course of study.

a. Form Current Events Clubs—have them meet once a week for a study of current events.
b. On Friday afternoon devote a part of the program to current events.
c. Endeavor to interest pupils in current topics.
d. Encourage the reading of newspapers and magazines.
e. When possible, link the past historical event with events of the present day.
f. Let the past event explain the present situation when it is possible to make a comparison or contrast.
g. Compare past events with present conditions.

V. LIST OF BOOKS FOR REFERENCE AND SUPPLEMENTARY READING.

Note—The list is by grades. It is by no means complete. It is merely a suggested group of standard works on Historical topics.

FIRST GRADE.

The Child's World.—Poulsson.
Morning Talks.—Wiltse.
Eskimo Stories.—Smith.
Seven Little Sisters.—Andrews.
Stories of Animal Life.—Bass.

SECOND GRADE.

Bible Stories from the Old and New Testament.
Story of the Bible.—Hurlburt.
The Book of Knowledge.

THIRD GRADE.

Sailing Ships and Their Story.—Chatterton.
How We Travel.—Chamberlain.
Little Folks of Many Lands.—Chance.
The World and Its People.—Book I.—Carroll.
Geographical Nature Studies.—Payne.

FOURTH GRADE.

Children's Book of American History.—Blaisdell and Ball.
First Course in American History.—Hodgdon.
Stories of Colonial Children.—Pratt.
Stories of Great Americans for Little Americans.—Eggleston.

FIFTH GRADE.

Daniel Boone and the Wilderness Road.—Bruce.
American Inventions and Inventors.—Mowry.
Leading American Soldiers.—Johnston.
Historic Inventions.—Jacobs.

SIXTH GRADE.

Our Ancestors in Europe.—Hall.
Reading References for English History.—Cannon.
A History of England and Greater Britain.—Cross.

SEVENTH GRADE.

A Short History of the United States.—Bassett.
Beginnings of American People.—Becker.
Readings in American History.—McLaughlin.
Readings in American History.—Muzzey.

A SPECIAL LIST IS GIVEN FOR GEORGIA.

Stories of Georgia.—Joel Chandler Harris.
History and Civil Government.—J. H. F. McPherson.
Georgia—Historical and Industrial—Department of Agriculture.

PHYSIOLOGY AND HYGIENE

By Miss Lurline Parker, Field Worker G. N. and I. C.

GROUP 1.

First Month.

Items of the Daily Inspection as illustrations of personal hygiene. Emphasis on cleanliness. Story of "The Pig Brother." Show how and when to wash face, hands, neck and ears, head and hair. Bathtub nights. Cleanliness of feet and shoes.

Second Month.

Teeth—Cleanliness. Materials: Individual brushes, dentifrice, floss. Time of use; how to use (toothbrush drill), brush away from roots. Frequent visits to dentist.

Eyes—Protection from dust, light, fine work, slingshots, etc.

Third Month.

Skin—Protecting coat. Compare with lower animals. Care. Cleanliness. Purposes, kinds and times for baths (minimum 3 weekly.)

Clothing—Use of overshoes, coats; their removal from room. Clean clothing.

Head and Hair—Regular times to wash, cut and keep in order.

Nails—Clean and well kept. Harm of biting.

Fourth Month.

Food—Correlate with Child Health Alphabet. (See "Illustrative Material.") Use pictures, food charts. Compare body to engine, food to fuel. Regular habits of eating. Wholesome foods: Milk, cereals, fruits, vegetables, etc. Abstinence from tea, coffee, pernicious soft drinks (and sweets between meals).

Body wastes compared to ashes. Establish regular habits. Wash hands before meals and after attending toilet.

Fifth Month.

Fresh Air, Sunshine, and Exercise.

"The Five Best Doctors." (Jones' Keep Well Stories.)

Demonstration:

Materials—Two plants, one grown in sun, the other in shade.

Aim—To show how sunshine and fresh air affect plants and apply to children.

Observation—Contrast of the two plants, the one strong, vigorous, with vital resistance, the other weak and susceptible to plant diseases.

Application—Children are human plants; sunshine and fresh air give them color, strength and vigor.

Provide door mat. Have oiled floors. Windows open day and night. Out-of-door play, rest before and after meals. Importance of unobstructed breathing.

SIXTH MONTH.

Water. Enforce use of individual cups. Demonstrate making of paper cups. Keep water supply pure. Eight glasses daily. Sip at meals after food is swallowed. Encourage use of water "internally, externally and eternally."

SEVENTH MONTH.

Correct sitting and standing postures. Inspection and drills for correction. Habits predisposing to bad posture, as carrying books, papers, wrong seating in school, etc. (See Posture Under Physical Examination.) Keys to good posture: Head up, Chin in, Chest up, Waist in, Knees straight, Body weight on balls of feet and toes straight ahead.

EIGHTH MONTH.

Prevention of contagious diseases; colds, epidemics. Suitable clothing for weather and season. Clean handkerchiefs to cover coughs and sneezes.

"Cover up each cough and sneeze,
If you don't, you'll spread disease."

"When you have to cough or sneeze,
Do it behind your handkerchief, please."

Fresh air, good food and regular habits; purity of air, water, food; cleanliness of clothes and surroundings as preventive measures.

GROUP II.

FIRST MONTH.

Food—Demonstrations, pictures, charts (made by pupils). Use in body, how to select; cooking of certain foods (starches, etc); caring for food by cleanliness, cold, heat, guarding from flies, etc. Caring for digestive organs by exercise, mastication, quantity, coarse foods, regularity, wholesome hot lunches at school properly eaten.

SECOND MONTH.

Reasons for cleanliness of teeth morning and evening. Individual toothbrush, how used. Continue toothbrush drills. Clean eyes, ears, nose, skin, hair, etc. Cleansing hot baths. Removal of underclothes at night, relation to healthy skin.

THIRD MONTH.

Fresh air. Suggested experiments:

1. Materials: Glass of lime water, cane or glass tube.
   Aim: To prove that we exhale carbon dioxide.
   Operation: Breathe into lime water.
   Observation: Lime water turns milky.
   Conclusion: Lime water made milky by $C.O_2$; we exhale $C.O_2$.

Demonstration (to be given by pupils).

Materials: Apple or other fruit from open fruit stand; clean cloth.
Aim: To show danger of not properly cleansing fruit before eating it.
Operation: Wipe fruit with cloth.
Observation: Cloth is soiled.
Conclusion: Always wash or pare fruit before eating it.
Application: Incidents of disease carried thus (notably typhoid).

2. Materials: Candle, glass, cardboard, and grasshopper.
   Aim: To show that Oxygen supports a flame and also life.
   Operation: Place candle in glass, light it and cover with cardboard.
   Observation: Flame goes out.
   Conclusion: Oxygen supports the flame.
   Application: Put grasshopper in this glass which is destitute of Oxygen and note results. Grasshopper is limp from heat and lack of Oxygen. (Body a stove, need of Oxygen for combustion).

Proper way to dust (demonstrate with cloth dipped in solution of kerosene and water, or prepared furniture oil). Danger of feather duster.

Ventilation of sleeping and living quarters. Room temperature 65 to 68 degrees F.

Value of sunshine (nature's disinfectant).

Recreation in out-of-door sports.

FOURTH MONTH.

Abstinence from tobacco, tea, coffee, pernicious soft drinks, and alcohol.

Tobacco and economy, heart, digestive organs, nervous system, scholarship.

Substitute milk (one quart daily is needed for children) for tea and coffee.

Take fruit juices free from carbonated water for soft drinks.

FIFTH MONTH.

Emphasis on posture. During entire year teach children how to sit, how to stand, how to recline (without pillow).

Exercises for good posture, games, muscular tone, normal weight, etc., as conducive to good posture.

Effects of bad posture on bony structure, vital organs, digestion, circulation, respiration, etc.

Keys to good posture (See Group I, Sixth Month).

Give Bancroft's Triple Test. (See Posture under Physical Examination.)

SIXTH MONTH.

Disease germs. Have class bring examples of plant parasites (mistletoe, lichens, tree ferns, etc.). Show effects of helpful (as in sour milk, etc.) and harmful (disease) bacteria. Possibility of preventing harm from harmful ones. (A strong body conquers harmful bacteria.) Danger of carriers. Sanitary milk and water supply.

Insect-borne diseases: Typhoid Fever; Malaria; Bubonic Plague; Sleeping Sickness.

Spray-borne diseases: Tuberculosis, Pneumonia, Influenza, etc.

Study present or past epidemics in community and make recommendations.

SEVENTH MONTH.

Care of lungs and air passages. Compare breathing of other animals with breathing of man. Record. Organs of elimination: Kidneys, skin, lungs, and intestines. Care of each. Frequent baths.

Bring samples of clothing material and tell sources. Power of absorption and evaporation. Relation to health.

EIGHTH MONTH.

Care of eyes and ears. Accidents. Prevention. Treatment.

Suggested exercise for class: (1) Look at fine and large print; distance. (2) Blackboard; contrast clean and dirty. (3) Whisper; tone effect.

Effects of overtaxing auditory nerves. (Defective hearing is common among men who work in factories where there is continual, loud noise.)

Shell shock.

GROUP III.

FIRST MONTH.

Sanitation. Disease germs. Entrance into body. Struggle between body and germs. Rules for preventing germs from entering body. How body destroys germs. Cleanliness, neatness, order. Rela-

tion to health of classmate. Condition of schoolroom. Value to school and community.

Organization of Sanitary Squads to inspect hygienic conditions of school and for neighborhood work.

SECOND MONTH.

Cleanliness of Surroundings. (Sanitation.) Dust and its dangers. Control. Waste paper baskets, fruit skins, paper, etc., on sidewalks.

Where germs grow. Preventive measures and control.

Suggestion:Make a sand table representing clean homes, yards, barns, etc.

THIRD MONTH.

State Department of Health, relation to health of people. Medical examination. Co-operation of parents. Report contagious diseases. Quarantine and disinfection. Squads to fight mosquitoes, flies, rats, roaches, etc., and report at intervals what they have done.

Birth certificates. Vaccination certificates. Typhoid inoculation.

The Ellis Health Law of the State of Georgia provides county boards of health, names their duties and fixes their source of compensation; it creates sanitary districts, etc. (Copy of this law may be obtained by writing to the State Board of Health, Atlanta, Ga.) After January, 1921, Georgia will probably be the leading state with regard to full-time Health Officers.

FOURTH MONTH.

Sanitation of the classroom. Open-air and open-window classes. Individual cups, towels, pencils, etc. Lighting, seating, floors, room temperature as preventing physical defects.

FIFTH MONTH.

Relation of care of home to neighborhood. Noise, odors, plumbing, garbage.

Pure Food Laws. Importance of purchasing food from clean, screened stores. Necessity for screening houses.

Demonstrations by members of class on different phases of good housekeeping. (Proper way to dust, sweep, clean metals, remove stains, bed making. Selection and care of hangings, furniture, wall paper, household linens, etc.)

SIXTH MONTH.

Diseases. Smallpox vaccination. Length of immunity. Cause of rabies. Prevention, Treatment. Isolation and quarantine of Measles, Chicken Pox, Scarlet Fever. Local and especially important: Hook worm, Typhoid, Malaria.

Symptoms. Entrance into body. Where most common. Prevention. Treatment.

Explain anti-toxin, serum, etc.

SEVENTH MONTH.

The House Fly. Life history, habits, etc. A disease carrier (show pictures). Remove breeding places, screen, swat. How to keep milk, etc., germ free. Make model of sanitary dairy as class problem.

Diseases contracted from impure milk. Pasteurization (killing germs in milk) heating it to 170 degrees F. and keep at this temperature one hour. Milk for use of baby should be put in clean bottles with small necks and stopped with a pledget of absorbent cotton. Place this in wire basket or frame and immerse in a kettle of cold water, heating it gradually. At proper time remove, quickly place on ice and do not remove cotton until ready to use, then warm and give to baby.

Disinfection: Light, heat, chemicals.

Unhygienic habits: Putting fingers in mouth, hands to face, exchanging books, pencils, towels, cups, etc. Spitting is so prevalent that it needs special emphasis.

EIGHTH MONTH.

Public sanitation. Its field. Necessity for support of public health officers. Quarantines, epidemics. Building and support of hospitals and sanitoria. Provision for water supply, sewerage disposal. Collection of vital statistics and reporting contagious diseases.

The people should be educated in regard to preventable diseases. (Georgia's toll from preventable diseases is about 100 per county annually, which costs the state about $45,000,000.)

GROUPS I, II AND III.

NINTH MONTH.

Review year's work. Observation as to effort and success of pupils of putting into actual practice the instruction of the term in hygiene.

Have public exhibit of charts, sand tables, projects, pageants, showing work in health.

In addition to the thirty minutes of Hygiene and Physical Education required daily in all Georgia schools, not less than one hour each week (two thirty minutes periods are suggested) is to be devoted to the practical instruction in Physiology for sixth and seventh grades each.

The following outline of Lessons in Physiology is based on the state adopted texts, namely: Ritchie-Caldwell "Primer on Hygiene and Sanitation," taught in the sixth grade, and Winslow's Healthy Living," Book II, taught in the seventh grade.

More advanced work in Physiology should be done in the High School. For this work the teacher will find the following books indispensable:

1. Hough and Sedgwick—The Human Mechanism—Ginn & Co. Pub.
2. Martin—The Human Body.

Suggestions:

Class work should be made as concrete as possible. The free use of diagrams, experiments, collateral reading, library reports, etc., is indispensable in making the work objective.

PHYSIOLOGY

FIRST MONTH—BONY SYSTEM.

(a) Function of skeleton.
(b) Parts of skeleton.
1. Study drawing of skeleton and positions of bones.
2. Composition of bones. Experiment: Place slender bone in muriatic acid until mineral matter is taken out of it, then tie it in a knot. Show similar bone after animal matter has been burned out of it.
3. Ligaments, their function.
4. Study diagrams of joints:
Hinge joint, as elbow.
Ball and socket, as shoulder.
Gliding, as wrist.
5. Study diagram of spinal column. Structure of vertebræ. Normal curves. Relation to posture.
6. Study normal position of bones of the feet.

SECOND MONTH—MUSCULAR SYSTEM.

(a) Structure of muscles. Fibers and tendons.
1. Voluntary.
2. Involuntary.
(c) Functions. Contraction of fibers causes movements.
1. Draw diagram showing biceps of arm in lifting of weight.
2. Feel biceps when bringing hand toward shoulder. Relax, showing antagonistic action of muscles.
3. Study action of various muscles. Open and close hands and notice movement on the front of the wrist.
(d) Effect of muscular exercise on body. Best exercises are those that develop as many of the muscles of the body as possible.

THIRD MONTH—DIGESTIVE SYSTEM.

(a) Use diagram to show names of parts of alimentary canal and where each part begins and ends.
(b) Discuss glands found in it and their functions.
(c) Digestive purposes of saliva, gastric juice, pancreatic juice, and intestinal juice.
(d) Pharynx and esophagus. Difference in esophagus and windpipe. Walls of esophagus contain muscles which contract and push the food along.
(e) Stomach, size, shape, and position. Digestion in stomach. Use experiment to show digestion of white of egg (p. 31 Richie-Caldwell Primer).

(f) Small intestine. Length and position in body. Chief seat of digestion and absorption. Structure and function of villi. Illustrate absorption by showing how salt or sugar dissolved in water will pass through a paper.

(g) Storage of food in body.

(h) Colon, size and direction, function. Appendix, position. Causes of appendicitis. Mesentery and its function.

(i) Know the meaning of mastication, digestion, absorption, and assimilation.

(j) Teeth, structure. Show models and diagrams. Relation of sound and unsound teeth to digestion.

FOURTH MONTH—RESPIRATORY SYSTEM.

(a) Organs of respiration consist of nasal passages, pharynx, larynx, windpipe or trachea, bronchi, and lungs. Draw diagrams of cross section of these parts, showing relative shapes and length of each and their location.

(b) Study from diagrams nearness of heart to lungs, arteries going to lungs, capillaries returning to heart.

(c) Relation of eustachian tube to pharnyx. Show how defective hearing may result from diseased tonsils which should be removed.

(d) Adenoids obstruct breathing and should be removed.

(e) Respiration. Blood gives oxygen to cells and receives carbon-dioxide from cells.

(f) Mechanics of breathing. Lung cavity enlarges by contraction of muscles between ribs raising breast bone and front end of ribs and of dome shaped diaphragm, enlarging the central part of the thoracic cavity regularly about twenty times a minute, and air goes into the partial vacuum. Process reversed in expiration.

Experiment:

Aim: To show action of diaphragm in breathing.

Materials: Lamp chimney or bottle with bottom broken out, rubber tissue, string, cork, and bicycle pump.

Operation: Tie rubber tissue over one end of lamp chimney or bottle, place cork to fit other end, bore hole, and insert tube from bicycle pump. Operate pump.

Observation: Watch action of rubber tissue when pump handle is drawn.

Conclusion: Action of diaphram is analagous.

(g) Healthy lung tissue will float because of air sacks. Diseased lung tissue will not float, as air sacks are solidified.

FIFTH MONTH—CIRCULATORY SYSTEM.

(a) Function of circulation is to carry food and oxygen to all parts of the body.

(b) Study and make the following drawing carefully: One of gen-

eral circulatory system showing venous and arterial blood in colors and passing through lungs, liver and kidneys.

(c) The blood flows in the following circuit:

SYSTEMIC CIRCULATION...
- Right ventricle to
- Pulmonary artery to
- Lungs to
- Pulmonary veins to

PULMONARY CIRCULATION...
- Left auricle to
- Left ventricle to
- Aorta and its branches to
- All organs of the body (except the lungs) to
- Veins which unite to form the venæ cavæ to
- Right auricle to
- Right ventricle.

(d) The Heart. Use diagrams to show size, shape, position, pericardium, endocardium, auricles, ventricles, valves; functions of each.

(e) Arteries and veins. Their structure and position.

(f) The blood. Composition; function of each constituent.

(g) Lymphatic system. Blood and lymph internal medium in which tissues of the body live. Lymph primarily derived from blood is renovated by blood. Sewage stream of body.

(h) Control of temperature of body.

SIXTH MONTH—EXCRETORY SYSTEM.

(a) Different kinds of poisons, consisting mainly of carbon dioxide, water, urea, inorganic matter, etc., are accumulating all the time in the body and require different organs to carry them out of it.

(b) The following organs have for their principle function the freeing of the body of this poison and refuse material:

1. Lungs, giving off C O_2 and H_2 O.
2. Kidneys, giving off urea, uric acid, etc.
3. Intestines; nitrogenous compounds.
4. Liver; bile pigments.
5. Skin; urea, salts, water.

(c) Importance of keeping excretory organs in good condition. Compare body wastes to ashes or sewage system of a city. Neither engine nor city can do efficient work if clogged with refuse.

SEVENTH MONTH—NERVOUS SYSTEM.

(a) Function; power governing the body, making teamwork possible; consisting of motion and sensation.

(b) Central nervous system, brain, spinal cord and nerves which run out from brain and spinal cord to all parts of the body.

(c) Functions of cerebrum, cerebellum, medulla oblongata, and spinal cord.
(d) Kind of nerve fibers:
1. Sensory or afferent fibers, bringing in sensations to brain, etc.
2. Motor or efferent fibers, taking sensations from brain, etc.
(e) Show by diagram reflex action, example of removing irritated part and irritating object.
(f) Sympathetic system.
(g) Voluntary and involuntary actions, and examples of each.
(h) Habits. Development and maintenance power strengthened by activity. Inhibitory processes.

EIGHTH MONTH—SPECIAL SENSES.

(a) Seeing, hearing, tasting, smelling, and feeling.
(b) Study and draw diagram showing:
1. Cross section of eye, naming parts, emphasis on optic nerve, action of light in passing through convex and concave lens. cause and remedy of near-sightedness and far-sightedness.
2. Cross section of ear, naming its parts.
3. Taste. Relation of taste and smell.
(c) Importance of educating each of the special senses

LESSONS IN CIVICS FOR THE PRIMARY GRADES

BY SUPERVISORS GEORGE GODARD AND E. A. POUND.

The results desired in the teaching of Civics in the grades are the development of the elemental virtues: Honor, kindness, truthfulness, respect for self and others, self-control, prudence, courage, benevolence, consecration to duty, comradeship, usefulness, patriotism, politeness, neatness, orderliness, fortitude, perseverance, fidelity, etc.; the development of large group consciousness, stimulation of the social and altruistic spirit, and, indeed, the inculcation of the real spirit of democracy, which may be interpreted by the phrase "not that I am as good as you are, but that you are as good as I am."

In order that the forward looking teacher may catch an inspiration from the latest treatment of primary civics, she is referred to "Teachers' Leaflet No. 9, 1920"—entitled "Lessons in Civics for the Elementary Grades." This is the work of Miss Hannah Margaret Harris of the Normal School, Hyannis, Mass., and Assistant, Bureau of School Activities Junior Red Cross. This syllabus is published by the Bureau of Education, Washington, D. C., and may be had upon application to the Bureau, or to the American Red Cross, Southern Division, Atlanta, Ga.

The work is developed upon the following plan:

"1. Children's experiences the basis of the instruction.

2. Materials must be related to some Civic situation in which the child is normally placed.

3. Situations typical of children's experiences.

4. Lessons based on these situations.

5. Continuous and cumulative instruction.

The following are situations of civic significance that may be used in the first grade and the development of a lesson under topic No. 5. A study of this lesson will be helpful to any teacher who will study same, as it will be a guide to the development of other lessons on other topics of civic significance.

"SITUATIONS OF CIVIC SIGNIFICANCE."

1. The daily walk from school.

2. Entering the school building and leaving it by assigned doors, hallways, and stairways, according to prescribed rules for filing, etc.

3. Becoming familiar with schoolroom surroundings, furnishings, decorations, material for work.

4. Playing on the school playground with many playfellows.
5. Using coat closets, toilet rooms, drinking fountains, etc.
6. Taking part in fire drills.
7. Coming into contact with certain persons who represent the authority and service to organized society.
8. Taking part in patriotic exercises.
9. Providing entertainment for persons who need good cheer.

Lesson developed, using topic No. 5.

V. USING COAT CLOSETS, TOILET ROOMS, DRINKING FOUNTAINS, ETC.

1. Children's experiences and observations.
   a. Being required to put away clothing and find it again promptly.
   b. Using conveniences of toilet room, different perhaps from those at home.
   c. Having to wait for a "turn to drink," missing the use of a glass, etc.
2. Teacher's interpretation and enlargement.
   a. because there are so many of us, when we are dismissed, each one must find his outer garments quickly. *One* who is slow delays *all.*
   b. Each one's mother can help us by marking his name in his hat, coat, overshoes, etc.
   c. Each one of us can help by having "a place for everything and everything in its place."
   d. We must take good care of our clothes, for they cost our parents money and labor. If we see clothing on the floor, we pick it up and give it to the owner or put it in a safe place.
   e. The bowls in the toilet room are placed there in order that we may never have dirty faces or hands in the schoolroom. We must never wash in a dirty bowl, or leave one dirty for others. The toilet room should be the *cleanest* room in the building.
   f. The pipes in the toilet room are for drainage. They will not carry away hair or other waste. When pipes get clogged, it costs a great deal of money and labor to clean them. Throw all the waste in the *waste basket.*
   g. We must not drink from the same glass that is used by anyone else. Someone may be sick and yet not know it. If we drink from the same glass, we may get his sickness. Someone may have canker or other sores in his mouth, and not know it. If we drink from the same glass, we may have the sores. We may all drink from the fountain, if our lips touch only the water.
3. Methods of teaching.
   a. Careful explanation and demonstration by the teacher, repeated frequently for several days at first.

b. Appointment of those who learn first to help others.

4. Results to be worked for.
   a. Understanding that the fact of large numbers being involved must affect the action of each individual.
   b. Knowledge that articles of the commonest use cost money and labor.
   c. Habits of carefulness and thrift.
   d. Appreciation of order and neatness.
   e. Habits or orderliness and cleanliness.

OTHER SITUATIONS OF CIVIC SIGNIFICANCE.

The Fourth Year of School Life.

1. Receiving school books and materials for school work as loans from the city.
2. Riding in public conveyances.
3. Visiting public places.
4. Choosing recreations and taking part in them.
5. Helping to care for surroundings: At school, at home, and in the neighborhood of each.
6. Taking part in fire drills.
7. Seeing parades or reading headlines which give prominence to city officials.
8. Taking part in the celebration of a day dedicated to any American patriot or group of patriots.
9. Providing entertainments or gifts for persons who need good cheer or writing letters to them.
10. Gardening at school or at home.
11. Taking care of younger children.
12. Arrival of new pupils or of visitors to the school.
13. Having opportunity to buy thrift stamps."—Harris.

Taught as in Lesson above. In order to develop any civic virtue the teacher merely has to select the proper civic situation and develop it through proper interpretation in such a way that it involves the stimulation of the result desired. Situations of civic significance occur constantly, and the teacher should utilize them as they occur. In this way it will be possible to develop all of the civic virtues. The ultimate result desired, of course, is good citizenship.

ACROSTIC.

C—Carefulness, courtesy, comradeship, community consciousness.
I—Interest in others; in community and country.
T—Thrift, truthfulness, trustworthiness, truth.
I—Intelligence in every civic situation.
Z—Zeal for the true, the beautiful, the good.
E—Enthusiasm for community, for country, for flag.
N—Neatness, nobility, nationalism, naturalness.
S—Stability, self-confidence, self-trust, self respect.

H—Humaneness, heroism, honor, humility.
I—Industry, insight, inspiration, initiative.
P—Prudence, politeness, patience, PATRIOTISM.
The above civic virtues spell "CITIZENSHIP."

Fifth, Sixth and Seventh Grades.

In the work of all the primary grades, the social, altruistic spirit should be stimulated, the willingness of the child to submerge selfish interests for the good of the whole stressed, the group consciousness and the spirit of group service developed.

Opportunities for this development occur constantly in civic situations that are normal to the child. Relating the child possessed with such a spirit to his environment and to his government is to lay the best foundations for citizenship. The idea should ever be kept before the child that there are other people in the world besides himself, and that above all things he is to serve.

The work should consist not so much in information as it should relate as heretofore largely to the will and moral relations. It should not only teach the essentials of good citizenship, but it should require constant practice of the virtues of good citizenship. The school should become "a civic gymnasuim, a drill- yard for the soldiers of the army of peace who ever march forward."

A pupil even in the primary grades should be given participative part in the activities of the community and should live his civics both upon the school ground and upon the street. As he has his chores in the family at home, so he should have his community-service chores, in order that he may properly be correlated with the life of the community. The children should be mobilized for community service as they were during the war. The consciousness of solidarity then engendered we should not lose, and will not lose, if we will give pupils a participative part in the affairs of the community, and mobilize this mighty Niagara of power—too often unutilized—as we did during the trying days of the World War. The school can point the way to civic efficiency by giving such participation.

Pupils of the primary grades would gladly aid in anti-fly, anti-mosquito campaigns, in the fight against weeds, in care and protection of the birds and trees, in the construction of things needed for the school, library, and laboratory. In looking after such things and the sanitary aspects of the school they can be given a participative part in the activities of the community in a way that will be worth much more than the mere memory work which we so often insist upon when teaching the subject of civics.

The civic spirit of the child having been developed in the primary and grammar grades, the time has now come when he should be introduced in a more formal way to a study of the organized social agencies through which men cooperate, hence, the introduction of the textbook in the seventh grade, as many pupils may not reach the eleventh grade, where a study of civics is made in a more intensive way.

USE OF THE TEXT.

Lapp and Brooks' Civic is prescribed for the seventh grade. Although the textbook should form the basis of the work, it should not be followed slavishly and should not be made the only source of information. The pupil should be taught that the duties of government are thus apportioned: The town or district government for the numerous and vital concerns of the neighborhood; the county government for the duties and concerns of the county; the state government for what relates to the state exclusively; the federal government for all matters relating to foreign affairs or that concern the people as a whole. Attention might be called to the fact that as the government was divided, so our school system should be planned to parallel it—a school for each district; a high school for each county; a college for the state or nation, at the common expense of all and free to all.

Above all, the pupils should be taught the following:

That the people are the government.

That the majority should rule.

Duties of citizens in respect to voting, to support our insitutions.

Their obligations to the government—local, state and federal.

Respect and reverence for law.

Proper regard for public and private property.

Respect for authority—in the home; in the school; in the church; in the community; in the state; in the United States.

The first day and the first week may well be spent in congenial talks and discussions in order to bring the pupils to see why they are undertaking the study of Civics. They should be taught that they must as citizens assume certain responsibilities and that if they do not assume them they can have no ground of complaint regarding the government under which they live.

In beginning the actual study of civics, begin with the near at hand, the means, activities and agents of government that are local, using the book largely as a reference book and for details. The local community affords a fine starting point for the work and in the study of facts in reference to the community a good basis may be laid for the more intensive work of "Community Civics," which is given in the first year of the high school. Once a basis of civic facts has been established by reference to the local community the teacher may proceed outward to the study of the state and federal government.

THE LOCAL SCHOOL DISTRICT.

It is advised that the teacher secure a map or outline of the school district and locate the school building in that district. Secure answers to such questions as: How many square miles constitute the district? How far from the school building does each child in the class live? Locate on the outline map the place of his home, showing relative distance and direction.

Work out a map of the school district and have it preserved on the blackboard, until it has been as fully developed as possible. Then let the children draw a copy of it on their paper for preservation.

How many people live in the district who have no children in school? Are they patrons? Use dictionary to answer. How many voters are in the district? The secretary to the local school board will be able to supply the information.

How many trustees has the district? How and when are they elected? Name them. What are their duties? The children can secure answers from the members of the board of trustees.

Explain the likeness of a town or city system, giving any difference which may exist.

TAXATION.

Any and all governments are created either directly or indirectly by a group of people for the purpose of securing conditions of life and agencies which make for their security, peace, health, and comfort. Governments are cooperative associations for the purpose of supplying needs. These needs are well stated in the Constitutions of the state and federal governments as being "life, liberty, and the pursuit of happiness," together with all things which these statements imply.

To have home protected, health preserved, education and training developed, schools sustained, highways built and maintained, and laws administered justly,—these are common rights of all citizens of a government. That these rights may be secured for all, that officers be employed and paid, that materials be provided, and that courts of justice be maintained, there is need that a common public fund shall be levied upon every piece of property, every kind of business, and every protected interest. These funds are called taxes. They shall be spent for the benefit of all.

As conditions require, new forms of expenditure arise that all citizens may be more largely benefited. For illustration, the consolidated school for all children has been developed that a broader course of study may be placed in reach of the children, that better houses and equipment may be provided in central locations, that a larger number of teachers may be employed in one school, who are better trained for service and who have longer periods of time for recitation, thus giving superior opportunity for advancement, that transportaion beyond certain distances may be provided, that health and time of pupils may be preserved, that athletics may become a more vital force in the physical development of the bodies of children, etc. The common interest of citizens requires better highways and improved means of transportation.

While the rate of taxation increases upon property, business and persons, it should be brought to mind that expenditures by individuals are diminished and that taxation is a means which government uses to make all public interest common and to create a consciousness of interdependence of all citizens.

For whom is a school designed? For one or for all?

For whom is a public highway maintained? For whom is a court of justice organized and supported?

Government is a cooperative method of supplying needs, and taxation is a means of securing revenue to meet the cost of these needs.

Who levies the tax for schools? When is it levied? Who is responsible for the collection of the same? What results where a man refuses to pay the tax? Explain to the children that men are not taxed for schools, but that the property is taxed. It matters not whether the owner lives in the district, town or city or not. The property is there and must answer the tax collector's call.

Explain that the taxing power of a city, town, county, and state lies in an individual or individuals selected by the people, and the person or persons are responsible to the whole people for the performance of their duties.

THE COUNTY.

A county is a section of the state and forms a unit for the purposes of government. Explain this fully. If the teacher does not know these facts, he or she should seek this information from the ordinary, clerk, or commissioners of the county. Remember that this information may be had and should be secured. The children can assist in obtaining this information.

Who are the officers of the county? What are the duties of each? When are they elected? How long do they hold their offices? Should one resign or die, how is the vacancy filled?

MILITIA DISTRICT.

Each county is divided into a number of districts, each district definitely bounded by land-lines or natural barriers. The district is known as a voting precinct, the voting place or places being known as "the polls." Who is the justice of the peace in this district? How does he receive his office? What is a constable? Who is the constable of a district?

THE STATE.

It should be distinctly taught that the state is a unit of government and that a number of these units joined their interests for proection to for the nation. The Federal Government was created by colonies, known as "The Thirteen Original Colonies," later known as states. From time to time other states have been created as equals, according to the provisions of the Constitution of the United States. Let the pupils in the seventh and eighth grades familiarize themselves with the Constitution of the State of Georgia and of the United States.

What is the chief office of the government of Georgia? Who is the governor of Georgia? When is he elected? And when does he take office?

How many departments of government does the Constitution of Georgia provide? Name the heads of these departments.

What is the population of Georgia? How many people live on each square mile of territory as an average? Is the population of Georgia increasing as fast as the population of the United States?

THE NATIONAL OR FEDERAL GOVERNMENT.

The Federal Government of the United States has and exercises only such direction over the states as the states delegated to it in the formation of the Union. All rights not so delegated are reserved to the state governments. The National Government has four things assigned to it:

1. To attend to all dealings with foreign countries.
2. To provide protection against foreign nations.
3. To regulate trade among the states.
4. To build works for common needs.

Does the state or nation regulate foreign immigration?

What steps are necessary for a resident of a foreign government to be "naturalized" in the United States?

Can a state declare war against a foreign country? Why, or why not?

What buildings has the United States Government erected in the State of Georgia? Why were they built?

Who is the President of the United States? How many Cabinet officers has the President the right to appoint? Name as many of them as you can?

How often is the President elected? For how long a term? How many successive terms may he serve?

What are the chief duties of the President? See the Constitution.

THE CONGRESS OF THE UNITED STATES.

The Congress of the United States is the law-making body of the National Government. It is composed of two houses or bodies, the Senate and the House of Representatives.

The Senate consists of ninety-six members, two from each state in the Union. This gives equal representation to the states. The Senate members are elected by the people of the states, but they were formerly elected by the state legislatures. The House of Representatives consists of four hundred and thirty-five members, elected by the people from districts of the state proportionate to the population.

How many members of the House of Representatives in Congress has the State of Georgia? Are they all elected the same year? Who is your congressman? Who are the United States senators from your state?

Find a map in your county courthouse which shows the congressional districts, from which the members of the House of Representatives are elected. Have a copy of the map made and hang it in your schoolroom.

THE STATE LEGISLATURE.

Similarly to the organization of the United States Congress, the State Legislature is composed of two houses, the Senate and the House of Representatives. The members of the Senate are elected from senatorial districts, and the members of the House of Representatives are elected from the counties.

How many members compose the Senate of Georgia? How many representatives are in the House of Representatives of Georgia?

How often does the Legislature meet in Gorgia? When and for how long a session? What salary do the senators and representatives receive? Do you know the names of your senator and representative in the State Legislature?

What is the total number of persons whom a voter in your county assists in electing to make laws for the government of the people of your county, state and nation? If you live in a city or town, add the number of councilmen and the mayor.

QUESTIONS FOR DISCUSSION.

Resolved, That the work of the State Legislature is of more consequence to our welfare than the work of the Congress of the United States.

Resolved, That the work of the city council or commission is of more consequence to our welfare than the work of the State Legislature.

DIVISIONS OF GOVERNMENT.

It must be borne in mind that every republican government consists of three divisions: The executive department, consisting of those officers who put the laws into effect; the legislative department, consisting of the law-making bodies, the members of which are elected by the people and who make laws in accordance with what they judge the will of the people to be; and the judicial department, consisting of the courts which are authorized by the laws and which enforce the provisions of the laws as interpreted by the courts. How are judges selected?

In the executive department will be found the president, his associates in departments, the governor and his associates, the sheriff and his assistants, the mayor and his department assistants, etc.

The legislative department has already been described.

The judicial department consists of the United States Supreme Court, the highest court known to the people; the Circuit Court of Appeals, District Court, Court of Claims, and Court of Customs; the Supreme Court of each state, county, Circuit or District Court, City Court, Justice of Peace, Juvenile and Special Courts.

A clear and special study of these departments and their respective officers should be made with the pupils.

For reference the following books will be helpful:

Lessons in Civics for Elementary Grades.—Hannah Margaret Harris.

Our America—The Elements of Civics.—John A. Lapp.
Teaching Elementary School Subjects.—L. W. Rapeer.
School Civics.—Frank David Boynton.
The American Citizen.—Dole.
The Young Citizen.—Dole.
The Community and the Citizen.—Dunn.
Citizenship in School and Out.—Dunn and Harris.
Teachers' Manuals of the States of Florida, Wisconsin and others.

NATURE STUDY AND AGRICULTURE

I. S. SMITH, State School Supervisor.

The following outline is offered as a nucleus around which a resourceful teacher may build up her course in Nature Study for the first, second and third grades. It is hoped that each child will be taught to be a closer observer of those things he finds about him, and by so doing develop a greater love and appreciation for the world about him.

Dr. Bailey says of Nature Study: "Its legitimate result is education—the developing of mental power, the opening of the eyes and the mind, the civilizing of the individual. As with all education, its central purpose is to make the individual happy; for happiness is nothing more or less than pleasant and efficient thinking, coming from a consciousness of the mastery, or at least the understanding, of conditions in which we live."

FIRST TO THIRD GRADE.

1. SEASONS.
   1. Name the spring, summer, autumn and winter months.
   2. Note the changes in length of days and nights.
   3. Note the change in dress of plants and animals. Give reasons.
2. DOMESTIC ANIMALS.
   1. Name as many as possible.
   2. Study their habits, uses, kinds and care.
   3. In what ways are they of greater use to man?
3. FISHES.
   1. Perch, etc.
   2. Kinds.
   3. Where found, how they raise their young, how caught.
4. BIRDS.
   1. Blue bird, robin, dove, crow.
   2. Where they nest, and how they feed and care for their young.
   3. Where they dwell, their habits and what they eat.
   4. Are they an asset or liability to the farmer?
5. INSECTS OF THE HOUSEHOLD.
   1. Flies, mosquitoes, clothes-moth, flees, bed-bugs, etc.
   2. How they raise, procure food, and effect our comfort.
   3. How destroyed.
6. FLOWERS.
   1. Let the pupil learn by sight and smell such common flowers as violets, pansies, hyacinths, petunias, etc.
   2. Have them grow some in their window boxes and at home.

7. TREES FOR LUMBER.
   1. Pine, oak, hickory, etc.
   2. Study and name the different kinds.
   3. Have them bring leaves and fruits of each to the teacher for study.

FOURTH AND FIFTH GRADES.

1. SEASONS.
   1. Keep a calendar showing the sunny, cloudy and rainy days.
   2. Study the advance of each season and its effect on man, animals plants.
   3. Note the sun-rise and sun-set.
2. DOMESTIC ANIMALS.
   1. Class them into families.
   2. Study the characteristics of each family.
   3. In what respect are they of most use to man?
3. FISHES.
   1. Name as many kinds of each as possible.
   2. Describe each kind, giving size, shape and characteristics.
   3. In what waters are they found, and what do they eat. How caught.
4. BIRDS.
   1. Make a calendar of birds that do not migrate.
   2. Study them as to size, color, habits, song, and what they eat.
   3. Where and how they nest, and care for their young.
   4. Are they an asset or liability to man?
5. INSECTS OF THE GARDEN.
   1. Codling-moth, peach-tree borer, rose beetle, cane caterpillar, cut-worms, etc.
   2. Study how they raise and how they can be controlled.
6. WILD FLOWERS.
   1. Have children bring them to school for study.
   2. Learn to name them and study the kind of soil in which they grow.
   3. Study the season for germination, growth and bloom.
   4. The insects that attack them and how they can be subdued.
7. FRUIT AND SHADE TREES.
   1. Apple, peach, pecan, orange, etc.
   2. Study and name the different kinds, how and where they grow best.
   3. The insects that affect them and how then can be subdued.
   4. Have children bring fruits and nuts to school for study.
   5. Study as to food value and how best kept for future use.

SIXTH GRADE.

1. SEASONS.
   1. Study the cause for change of the seasons.
   2. How this change affects the pursuits, food and clothing of man and animals.
2. WILD ANIMALS.
   1. Name as many as possible.
   2. Class them into families.
   3. Study their habits, where they live, what they eat, how they care for their young.
   4. Are they an asset or liability to man?

3. MISCELLANEOUS.
   1. Study frogs, snakes, rats, turtles, etc.
   2. Name the kinds, what they eat, where found, and how they care for their young.
   3. Are they an asset or liabiltiy to man?

4. BIRDS.
   1. Have children make a chart of migratory birds.
   2. Where, when, and why do they migrate?
   3. Study them as to size, color, habits, song, and what they eat.
   4. Where and how they nest and care for their young.
   5. Are they an asset or liability to man?

5. INSECTS BEAUTIFUL AND BENEFICIAL.
   1. Honey-bee, lady-bug, tiger-beetle, butterflies, etc.
   2. Study where and how they are raised.
   3. What they eat and how they procure it.
   4. Bring specimens to school for study.
   5. How they are of value to man.

6. FLOWERS.
   1. Encourage children to plant flowers at school and home.
   2. Make a list of those that bloom; those that do not.
   3. Have them bring flowers to school for study. Name the parts and functions of the flower—petals, sepals, avules, ovary, stigma, anthers.
   4. Study the effect of a visit to the flower by a honey-bee.

7. TREES.
   1. Have pupils make a chart of those trees valuable for shade, beauty lumber, nuts, fruits.
   2. Study effect of fire to forest.
   3. How forest can be best preserved. Why preserve them?

AGRICULTURE

SEVENTH GRADE.

This brief outline for the study of Agriculture in the Public Schools of Georgia is offered as a nucleus around which the teacher may build up her work. It is recommended that as many impressive experiments be performed by teacher and pupils as possible. Georgia farmers can greatly increase their prosperity and happiness by making a closer study of their soils. Giving the question of drainage, terracing, subsoiling and the planting of such crops as will add more humus to the soil more consideration. We have sufficient chemical elements in our soils to produce abundant crops, but they become available only to the extent, that we give the above factors the proper consideration.

1. SOIL.
   1. What is soil?
   2. How is soil made?
      a. The organic elements.
      b. Inorganic elements.
      c. Transportation of soils.
   3. Resources of the soil.
2. TEXTURE AND STRUCTURE OF THE SOIL.
   1. What is meant by texture?
   2. Why are texture and structure important?
   3. How good texture is obtained.
   4. Structure and Manures.
3. MOISTURE IN THE SOIL.
   1. Why moisture is important.
   2. How water is held in the soil. How to increase the capacity.
      a. By adding of humus.
      b. By under drainage.
      c. By proper tillage.
   3. The conservation of moisture.
4. TILLAGE OF THE SOIL.
   1. What is tillage?
   2. What tillage does.
   3. How tillage is performed?
      a. By deep working tools.
      b. By surface working tools.
      c. By compacting tools.
5. ENRICHING THE SOIL — FARM RESOURCES.
   1. What are farm resources?
   2. Cropping resources.
      a. The kinds of green manures.
      b. The management of green manures.

3. Direct applications.
   a. Manures.
   b. Commercial fertilizers.
4. Elements in the soil.
5. Show how the elements in the soil become available.

6. Have children bring different soils to school for study, and observe the effect that rain, draught, freezes, and various insects have upon it.

7. Encourage each the cultivation of home plants and joining the various clubs supervised by the College of Agriculture.

1 THE PLANT AND CROPS.

1. Show the relation of the plant to the soil.
2. Its relation to the climate.
3. Its relation to animal life.
4. Its intrinsic value to man.
   a. As articles of food and beverage.
   b. As articles used in the arts.
   c. As objects to gratify aesthetic tastes.

2. HOW THE PLANTS LIVE.

1 Plant activities.
2. The factors of growth.
   a. Water in the plant.
   b. Soluable elements in the soil.
   c. Oxygen.
   d. Carbon dioxide and sun light.
   e. Effect of heat.
3. The process of growth.
4. Irritability.

3. THE PROPAGATION OF PLANTS.

1. Seedage.
   a. Requisites of germination.
   b. The raising of seed.
2. Propagation by buds.
   a. Why buds are used.
   b. Undetached buds.
   c. Detached buds.

4. THE PREPARATION OF LAND FOR SEED.

1. Have children make chart of grains, grasses, logumes, etc.
2. Study in detail the preparation of seed bed for the plants named.
3. Give reasons for the necessity of different preparation.

5. SUBSEQUENT CARE OF THE PLANT.

1. In general.
2. Fruit cultivation.
   a. Pruning and training.
   b. Healing of wounds.
   c. The principles of pruning.
3. By keeping enemies in check.
   a. Kinds of enemies.
   b. The preventatives such as sprays. The best spray will be advised by the College of Agriculture for the asking.

6. PASTURES, MEADOWS AND FORAGE.

1. Study the preparation of land.
2. Study the grasses or legumes suited to the soil and climate.
3. Study other forage plants with best methods of harvesting.

7. Continue to encourage the cultivation of home trees, cooperation with club work, the study of better seed selection and the study of the U. S. bulletins on Agriculture.

1. THE OFFICES OF THE ANIMAL.
   1. The animal and the stock.
   2. The animal and its relation to the soil.
   3. The animal and its relation to the crop.
   4. The animal has intrinsic value to man.
      a. As articles of food and clothes.
      b. As companions.
   5. The animal as a beast of burden.
   6. The animal as a pest-destroyer.
   7. The animal diversifies labor.

2. THE FEEDING OF ANIMALS.
   1. Study the sources of food.
   2. How the animal uses food.
   3. Feeding standards.
   4. The value of bulk in rations.

3. Have pupils to make a chart of all domestic animals, subdividing them into families. Describe each type.
   a. Show the advantage in having draft type of horses.
   b. Pure bred type.
   c. The advantage of milk type cattle.
   d. Beef type, etc.

4. MANAGEMENT OF STOCK.
   1. Breeding.
      a. How to attain the ideals.
      b. The value of proper breeding.
   2. Where stock raising is advisable.
   3. How much stock may be kept profitably.
   4. Study the care of stock.
      a. Housing.
      b. Water.
      c. Food.

5. Score cards for all types of farm animals as well as grains can be procured of the College of Agriculture and the U. S. Department of Agriculture and should be used freely; also formulas for the destruction of pests.

6. Continue to encourage the cultivation of home tracts and cooperation in the club work of the College of Agriculture.

The Course of Study provides for the use of Benson and Betts' Agriculture in this grade. Have the children perform experiments as provided in it.

It is suggested that practical work in spraying for plants and animals be done in this grade, using the formulas furnished by the U. S. Department of Agriculture, Washington, D. C., and the College of Agriculture, Athens, Ga. Score cards for the grading of corn, wheat, oats, etc., as well as the different types of animals can be secured from the above sources and I suggest a lot of practical work along this line in the 7th grade.

HOME MAKING IN THE ELEMENTARY SCHOOLS

MISS LOIS P. DOWDLE.

The organization and direction of boys' and girls' clubs constitute an integral part of the work of the elementary school in the rural sections. Efficient club work contributes to the efficiency of the school not only in its content but in its method and organization. No country school is complete without its consistent participation in some work of this character and this work is not complete unless it is tied up with the work in the home. In the same way the village, town or city school also needs to have its program correlated with the home activities of its pupils.

In far too many cases, the girl never goes to high school but stops school in order to help with the work in the home or to assume some of the financial responsibility of the family. The following work in Home Making outlined for the elementary school will help to prepare that girl for the arduous tasks in the home, while at the same time the girl who continues her study will be getting a good background for her high school work. This work will also be used by the good teacher in the conduct of the regular school routine of cleaning house and yard, the serving of school lunch, etc.

In the difficult problem of the handling of so many grades it may be wiser for the teacher to take all the girls in both the sixth and seventh grades in one group. In fact, any subject matter or any work other than the practical application of the principles taught should be given to boys and girls alike. This will do away with some of the difficulty of employment of the boys' time while the girls are at work and will also help to solve some of the family troubles that may arise later on in life.

It might be suggested that at least one period a week be given to the study of foods and one to the study of Clothing and Housekeeping combined. By making a two year program under each of these two headings a great deal can be taught. Where the school is in session nine months 36 lessons would thus be given while only 28 would be given if the school is in session only seven months of the year.

An outline is here given with the purpose of guiding the young teacher in the selection of topics for study. The topics should be so chosen as to have a seasonal aspect and where possible the cookery itself should be a means of contributing a hot dish to the school lunch.

Season	Topic	Subject Matter	Correlated Work	Suggested Dishes
Sept.	Bread	Kinds — Geographical distribution of grains. Milling. Leavening agents. Making of Bread in European countries.	Bread Baking Contests for community fairs. Making Home-made Bread Raisers.	Spoon Corn Bread. Hot muffins. Milk Toast. Corn sticks. Yeast Bread.*
Oct.	Cereals	History of corn growing. Keeping quality as a factor in distribution.	Selection of seed. Arithmetic problems in cost of meals with use of different cereals.	Polenta. Hominy. Rice. Croquettes with Tomato Sauce. Corn starch pudding. Corn meal mush.
Nov.	Meat and meat substitutes.	World wide distribution of meat. American Packing Industry. How England is fed. Live Stock Raising in Georgia.	Building Fireless Cooker.	Creole Chicken. Irish Stew. Beef Loaf. Pimento Sauce. Creamed chipped ham.
Dec.	Sweets	Beet sugar industry. Where sugar cane is raised. Maple sugar industry. Corn sirup.	Selling of candies and sweets at community socials.	Fruit Pastes. Date Loaf. Peanut Brittle. Plum Pudding.
Jan.	Fruits	Tropical and citrus fruits. Burbank's fruit growing. Geography by way of fruit. Georgia Peach Exchange.	Pruning and spraying school orchard. Planting of fruit trees. Planting of small fruit.	Apple and nut salad. Stewed dried fruit. Dried apple float. Canned peaches and tapioca pudding. Grape mince meat pie.
Feb.	Poultry Products	Preserving eggs in waterglass. Breeds of chickens. Distribution of Poultry Products.	Building mash hopper. Conducting Egg Laying Contest. Candling eggs.	Escalloped chicken. Creamed chicken. Egg sandwiches. Stuffed eggs. Goldenrod eggs.
March	Starchy Vegetables.	Seeds for European gardeners. Seed growing in the U. S. History of the Irish Potato.	Making of beds and the growing of sweet potato plants.	Sweet potato pone. Potatoes en Cassarole. Lima Bean Puree.
April	Green Vegetables.	Origin and use of tomatoes. New varieties of vegetables. The gardens of Holland.	Selling of tomato and pepper plants. Planting school garden.	Creamed cabbage. Cream tomato soup. Vegetable soup. Creamed carrots and peas.
May	Milk and milk products.	Milk, the perfect food. The dairy industry. Canning of milk. Foreign cheese manufacture.	Making Iceless Refrigerator. Making Fly trap.	Cocoa. Cottage cheese loaf. Junket Baked Custard.

* Yeast Breads to be made at home six or eight times; samples to be brought to school and judged and scored by teacher. Best results may be accomplished if a contest is held in connection with this work.

The work in cookery outlined above may be done with the minimum of equipment. The school heater may be used during the winter months for much of the work in cooking or a three burner oil stove may be owned by the school. If it is not advisable to do all the work here suggested such portions of this program as are adapted to the needs of the school may be chosen. The teacher who carries on the work of serving a hot dish for lunch will be amply repaid in better discipline, and faster development on the part of her students. The work of the second year may be along the same lines but simply going further into the study of the topics and new dishes may be prepared.

The work in Clothing and in Housekeeping will probably have to be divided so that each occupies only half a year. Cleanliness and personal hygiene may be taught along with this work and also with the cookery. Some suggestions for topics to be treated and problems to be worked out follow.

CLOTHING.

Patching a gingham dress. (The work to be done on the dresses owned by the girls themselves.)
Making holders and cup towels.
Darning hose.
Removing stains and ink spots.
Packing away winter clothes. Protection from moths.
Selection of a school girl's wardrobe.
Hemming desk covers to be used in serving hot lunches.
Making of collar and cuff sets, and handkerchiefs.
Making of night gown or kimona.

HOUSEKEEPING.

Sweeping and dusting school room.
Washing of dishes.
Laundering dish towels, desk covers.
Caring for left over foods and wrapped lunches brought from home.
The furnishing and care of the girl's own room; other home duties.

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THE HIGH SCHOOL

By Inspector J. S. Stewart and Supervisor E. A. Pound.

"Our high schools are the very essence of our democracy, as well as a device for securing democracy."—Baldwin.

"They should reflect the composite spirit that dominates American life, and should be at once the most thoroughly representative and the most generally democratic of the institutions which American ingenuity has devised or established."—Modern High School.

"Our ideas are shifting from the vague, general, externally inspired standards of mental discipline and college preparation to those translatable into twentieth century individual and social requirements."—Modern High School.

The Objectives of Education.

1. Health.
2. Fundamental Processes.
3. Worthy Home Membership.
4. Vocation.
5. Citizenship.
6. Worthy Use of Leisure.
7. Ethical Character—From Cardinal Principles of Secondary Education.

HISTORICAL.

Forward Steps in the Improvement of Georgia High Schools.

1. The passage of the McMichael Bill (1905) giving the taxing power to counties and militia districts for the support of elementary schools.

2. The Perry Act (1906) establishing the District Agricultural High Schools.

3. The Persons Constitutional Amendment (1910) which struck from the fundamental law of the State the words "the elements of an English education only," in the taxing power of a county.

4. The White Bill (1911) providing for a State Certificate for high school teachers.

5. The Stovall Constitutional Amendment (1912) striking out the words "the elements of an English education only," in Article VII, Section 1 of the Constitution.

6. The Smith-Hughes Congressional Act (1917) endorsed by the legislative act of the State for the encouragement of vocational education.

7. The Barrett-Rogers Act (1910) setting aside a part of the State

school fund as a bonus for the establishment of four year high schools in the counties where they are most needed.

8. Sec. 107 of the School Code (1919) authorizing the County Boards of Education to establish, one or more high schools or junior high schools through local taxation funds.

9. Sec. 109 of the School Code (1919) requiring 50 per cent. of all revenues received by the State to be used for the support and maintenance of the public schools after January 1st, 1922.

10. The regulation of the State Board of Education (1919) authorizing approved teacher training in the high schools of the State.

11. The Constitutional Amendment (1920) authorizing appropriations to high schools and to the University.

12. The Elders-Carswell Constitutional Amendment (1920) requiring every county to levy a local tax for school purposes from at least one to five mills.

The above legislative acts and constitutional amendments have removed restrictions existing in the State since 1877. In consequence both elementary and secondary schools will henceforth have legal authority and greater financial aid.

Regulations in Reference to the Organization and Classification of the High Schools of the State.

The plan of organization and classification set forth herein represents with the exception of the grouping of the accredited schools the first attempt to standardize or classify the high schools of the State.

The purpose of the State is to harmonize and to unify the work of the high schools by establishing minimum standards, by setting forth definite requirements for the attainment of these standards, to the end that they may work harmoniously and definitely together towards a common purpose in the preparation of their pupils for the duties of citizenship.

The high school authorities in the counties of the State are asked to lend their cooperation and assistance in putting into practice the suggestions and recommendations herein made.

Plan for Organizing the High School Work of the County.

There are in the State about two hundred accredited high schools. These have an attendance of 27,024. In addition to these there are over 1400 other schools teaching or attempting to teach one or more high school grades. They are unclassified, and often times present subjects without aim. They have an attendance of 16,000—an average of less than 12 pupils in high school subjects to the school. There are some counties with more than 30 schools teaching high school subjects.

There are 2824 one-room and 1247 two-room school buildings for whites in Georgia. Many of these schools with an enrollment of 40 or 50 pupils are giving more time to four or five high school pupils than to all the other pupils. These schools are largely unclassified, each hav-

ing its own standards unrelated to those of the other schools of either the county or the State.

It is useless to discuss the consolidation of all these. It would not be advisable or possible. Consolidation of many is no doubt necessary, but there is no reason why excellent work may not be done in one or two teacher schools, if properly organized.

The problem therefore, is so to organize these schools that every child may have the advantages of high school training under the best conditions, and at the same time secure the best instruction in the elementary grades.

Steps in the Solution of the Problem.

1. A desire on the part of the authorities to solve the problem in their own county.
2. The proper use of the keys to the solution: ELIMINATION, CONSOLIDATION.
3. The application of the proper methods:
   a. Organization.
   b. Classification.
   c. Standardization.

ORGANIZATION.

There should be a careful survey of the location and personnel of each school in the county, with the assistance of the Rural Supervisor and the High School Supervisor. Probably some consolidation will be found necessary in each county. Some schools may best be eliminated. Partial consolidation may prove cheaper and more satisfactory in other cases.

The first duty of the school system is to give thorough instruction in the elementary branches. Pupils in the elementary schools should be so well taught that it will be easy for them to enter creditably the higher grades.

In order to secure this efficiency it is necessary that as a rule the elementary schools of one or two teachers confine their work to seven grades or less. Usually the one teacher school can do the best work if confined to five grades.

There should be located in different parts of the county high schools offering two and three year high school courses embracing the 8th and 9th grades or the 8th, 9th and 10th, on the 7-2 or 7-3 plans. Whenever advisable the junior plan of organization may be adopted and the 6-3 or the 6-4 plan may be used. The latter schools would include the 7th, 8th and 9th grades or the 7th, 8th, 9th and 10th. In some cases the 6th grade may be added to these schools, especially the over age pupils of this grade. Schools of this type should include all the elementary grades supported by pupils from the immediate territory. These schools when thus organized should require the whole time of one teacher of

high school subjects or time of one and a half or two teachers if the work is continued through the tenth grade.

These Junior High Schools should receive pupils from a half dozen one or two teacher schools, transportation being furnished in case of pupils living too far to walk.

The number of these schools should be determined by the high school population, by the accessibility of the school, and also by the ability of the community to support and equip. The number of these schools may be increased as the population and financial conditions justify. Pupils upon the completion of two or three year high schools should enter creditably the central senior high school of the county, and continue their studies through the eleventh grade. These schools may be organized on the 7-4 or the 6-3-2 plans. The lower school grades of this school should be open to all the pupils of the elementary grades in the immediate territory and the upper grades to pupils from all parts of the county. Transportation by means of a truck or else a small per diem of 10 to 20 cents per day should be furnished by the county authorities.

The average county is not able to support more than one or two well equipped high schools. It is better, therefore, to have one strong, well equipped school of this kind receiving its pupils from all parts of the county than a larger number poorly equipped and attempting the impossible. The County Superintendent with the aid and assistance of the Principal of the Senior High School should supervise all the high schools under his jurisdiction, advising at times with the State High School Supervisor in reference thereto. Meetings should be called from time to time of the high school teachers of the county in order to bring about proper articulation and correlation of the schools of the county. There should be occasionally uniform tests prepared for the schools. There should also be uniform loose-leaf records of each pupil in the high school of the county; these to be deposited at the end of the term with the County Superintendent. As far as possible uniform textbooks should be used in each county. The result of the organization should be, instead of an independent number of isolated schools in each county, a well organized system of interrelated schools.

In counties where the Senior High School is not supported by county funds the County Board should arrange with the central school authorities for the payment of a reasonable tuition fee for pupils attending from the rural districts. This fee to come from county funds. In "State Aided" schools this fee is taken care of in the higher grades by the State.

CLASSIFICATION.

Purpose of Classification and Standardization.

The State having legally recognized the high schools as a part of the school system, the duty of classifying its high schools is obvious. The regulations governing State aid under the Barrett-Rogers Act make classification necessary.

By classification is meant setting a definite standard and encouraging schools to attain that standard. In order to become classified the schools should meet the physical requirements prescribed below, as classification will depend largely upon the physical conditions under which the work is done.

Classification gives to the school classified a position of dignity and prestige; it gives a definite aim in accordance with the recognized objectives of education; it provides definite ideals and gives proper direction.

Yielding to the above considerations, the State Department of Education divides the high schools into three groups: Four year schools; three year schools; two year schools. Junior high schools are to be listed according to the number of years work they offer in secondary subjects above the seventh grade.

CLASSIFIED SCHOOLS.

A high school offering four years' work above the seventh grade and meeting at least the physical requirements given below is to be classified as a school of the "A" class.

A high school offering three years' work above the seventh grade and meeting the requirements given below—at least, quantitatively, is to be classed as a school of the "B" class.

A school offering at least two years' work above the seventh grade and meeting the requirements given below—at least quantitatively, is to be classified as a school of the "C" class.

The following schools of the state have already been classified:

a. Accredited schools: Those that have met the requirements of the State University, its affiliated branches and other institutions of like grade.

b. The schools that have met the requirements under the Barrett-Rogers Act. These are all "A" class schools.

Information in reference to classification will be furnished by the State High School Supervisor.

Requirements for Classification.

A classified high school should satisfy reasonable requirements as to the following:

1. Material equipment.
2. Instruction.
3. Organization.
4. Curriculum.

Material Equipment. The building should be in good and safe condition, and the water supply, the ventilation, sanitation, lighting, school furniture and methods of cleaning should be such as to insure the best hygienic and sanitary conditions.

The plans of all new school buildings should be approved by the

State Department of Education and communities contemplating the erection of new school buildings should correspond with the State Superintendent in reference thereto, in order that they may be erected in accordance with scientific and approved plans.

The unit system is recommended inasmuch as rooms may be added whenever needed without destroying the symmetry of the building. Many communities of the state have been forced to build new buildings because they did not use such a plan. The unilateral system should be used in all new buildings. The employment of a competent architect is always advised.

The Library. The library should be an important part of every high school's equipment. The value of the library is to be measured not by the number of books contained therein, but the use to which it is put and by the relation that the books when used sustain to the work and the interests of the pupils of the school. It should contain good dictionaries of standard kind, classical dictionary, indexed atlases, World's Almanac, Rules of Order, a good encyclopædia, reference works for the subjects of study, and as many books for outside and general reading as can be afforded.

The Laboratory. An adequate amount of apparatus for every science taught. A list of dealers in physical and chemical apparatus is given on another page, and there are also given lists of apparatus that are considered necessary for teaching General Science.

Many topographical maps and charts may be secured from the United States Geological Survey or from the United States Coast and Geodetic Survey, Washington, D. C., at prices ranging from 10 to 50 cents.

Records. A permanent system of records should be kept. These are discussed elsewhere.

II. Instruction.

The minimum number of teachers of a four year school is two. The three year school should have at least one teacher giving whole time to high school subjects and another half time, preferably two teachers. Additional teachers are necessary if electives are offered.

Qualifications of Teachers.

The minimum educational requirement is the possession of a high school license; professional, of course, preferred. In order for a school to become accredited by the colleges it is required that teachers of such schools—at least three-fourths of them—should possess a college degree.

The equivalent of two full years college work subsequent to a four year high school course or equivalent successful experience should be the minimum requirement for the average high school teacher of the state—this to be supplemented by a professional license.

III. ORGANIZATION.

The length of recitation periods should be 45 minutes in the "A" class schools and at least 35 in the other classes.

The course of study should meet the requirements prescribed below. No high school teacher should be required to teach more than 35 recitations per week, laboratory periods should occupy twice the time of the regular recitation period.

IV. COURSES OF STUDY.

Definition. A unit is defined as the credit given for the satisfactory completion of five recitation periods per week in a subject extending over the entire school year of nine months and with recitation periods of such length as will give a minimum of 120 sixty-minute hours.

For classification or for graduation the schools should offer the following number of units' work as a minimum—more may be offered if teaching staff is adequate:

"A" Schools 15 units.
"B" Schools 12 units.
"C" Schools 7 to 8 units.

The normal amount of work to be carried in one year is four full time subjects each having five recitations per week. Five may be given to strong pupils.

English, mathematics, science and history being fundamentally important to all pupils should be regarded as major studies, and with these every one should have some acquaintance. The following are required in all four year courses: English, 3 units; history, 2 units; science, 1 unit; mathematics, 2 units — a total of 8.

Schools having only two teachers in the four year schools should attempt but one curriculum. Better teach one course well than to attempt to do what cannot be well done except under the best conditions.

IMPORTANT. The Federal Report on Educational Efficiency urges that the schools turn out pupils with more definite knowledge of the essentials of education—SPELLING, WRITING, ARITHMETIC and READING, these being needed in everyday life. However efficient a school may be in other respects, it should be largely judged by the degree of efficiency it shows in reference to these fundamentals and essentials.

The following are the number of units credit that may be allowed in any subject:

English, 1 to 4.
History, 1 to 4.
General Science, 1.
Biology, 1.
Physiology, ½ to 1.
Physiography, ½ to 1.
Physics, 1.
Chemistry, 1.
Foreign Language, 2 to 4.
Agriculture, ½ to 4.
Home Economics, 1 to 4.
Sociology, ½.
Economics, ½ or 1.
Mechanic Arts, 1 to 4.
Plane Geometry, 1.
Solid Geometry, ½.
Trigonometry, ½.
Commercial Arithmetic, ½.
Bookkeeping, 1.
Com. Geography, ½.
Stenography, 1 to 2.
Typewriting, ½ to 1.
Civics, ½ to 1.
Music, 1 to 2.

Suggestions as to Course of Study and Equipment.

Courses in agriculture and domestic science are recommended in all schools.

Physical education is now required by State law. One half hour is to be given to this daily.

In small schools with limited personnel work in Foreign Languages should be limited. When teaching force and other conditions warrant, pupils may properly take some other language than their own. However, as a rule when a Foreign Language is taken it should be required for at least two years. Spanish is strongly recommended because of its importance in the Western World.

Pupils preparing for college should shape their course in accordance with the requirements of the college they are to enter. The colleges require 15 units for entrance. Eight of these are prescribed. The others should be so chosen that they will best prepare for the work the pupil is to do in college.

Where possible, girls in high school should be taught Home Hygiene and Care of the Sick, and all pupils should be instructed in First Aid.

Do not confuse the requirements for classification of schools with requirements for pupils within the school. A school may offer more than fifteen units. Fifteen units is the minimum to be offered by an "A" class school, for classification purposes.

In order to meet the vital needs of a community it is advised that evening or part-time schools be organized wherever practicable.

THE SEVEN GROUPS OF STUDIES.

Every course of study should consist of one or more subjects from the following groups outlined on another page under the course of study: English, Mathematics, History and the Social Sciences, the Natural Sciences, Foreign Languages, Vocational and Avocational subjects.

THE CURRICULUM.

In order to develop a course of study, it is essential that the objectives be known. The tendency is away from studies with one aim and pur-

pose to those that have a more vital relation to the life interests of the child. The aims are expressed in the seven objectives reported by the National Committee on Reorganization of Secondary Schools.

With these aims and objectives kept in view we may enrich the work of the high school as never before. Freed from requirements that once fettered, the high schools may now relate their work in accordance with these objectives to the needs of the child and of the community.

The state has its requirements in reference to classification, but these standards will not be destroyed, but rather maintained, if school authorities seek out and find those things that are vital to the needs of the child and incorporate these in the curriculum. All that the State asks is that the children be not given a stone when they are asking for bread. Adapt the curriculum, if possible, to meet the vital needs of the community and the child. Part-time and Evening schools are encouraged in order, if necessary, to meet this consideration.

The state does not prescribe the curriculum. It merely suggests. The curriculums given herein do not represent specific requirements either as to subject or arrangement. Every school is free to make its own program. However, whatever course is selected, there should be a certain definite continuity of subjects even as electives in addition to those given as constants.

If the course of study leads one properly to interpret life, to vocational efficiency, to stronger bodies and better health, to efficient functioning socially and in a civic way, then the course of study is good. To aid every pupil to function efficiently is the cherished desire of the State.

SUGGESTED COURSE OF STUDY FOR HIGH SCHOOLS

For the five years beginning January 1, 1919, the following course of study is recommended. No particular high school texts are adopted, the local boards selecting those desired from the Yeoman's Text Book List:

	ENGLISH	HISTORY AND CIVICS	MATHEMATICS	SCIENCE	LANGUAGES	VOCATIONAL	AVOCATIONAL
FIRST YEAR	Composition, Grammar, Classics, Spelling.	Community Civics or English History.	Arithmetic and Algebra or First Year Mathematics.	General Science or Physical Geography	First Year Latin or First Year Modern Language.	Agriculture, Home Economics. Commercial or Manual Arts.	Physical Education, Music, Drawing.
SECOND YEAR	Spelling, Composition, Grammar, Classics.	European History or Ancient History to Middle Ages.	Algebra and Plane Geometry or Second Year Mathematics.	Civic Biology or Physiology and Hygiene.	Caesar and Composition or Modern Language and Composition.	Agriculture, Home Eco. nomics. Commercial or Manual Arts.	Physical Education, Music, Drawing.
THIRD YEAR	Composition, History of Literature, Classics, Public Speaking.	Modern History.	Plane Geometry and Algebra or Third Year Mathematics.	Chemistry or Physics.	Cicero or Virgil, or Modern Languages with Composition.	Agriculture, Home Economics. Commercial or Manual Arts.	Physical Education, Music, Drawing.
FOURTH YEAR	Spelling, History of Literature. Rhetoric, Classics, Public Speaking.	American History and Advanced Civics.	Solid Geometry Advanced Algebra or Advanced Arithmetic.	Pysics or Chemistry.	Virgil or Cicero or Modern Languages with Composition.	Teacher Training, Agriculture, Home Economics, Commercial or Manual Arts.	Physical Education, Music, Drawing.

NOTE—Three years of English, two of Mathematics, two of Social Studies and one of Science should be required as "constants" of all for graduation; two-fifths of the studies should be chosen for a definite preparation from the first six groups, leaving about one-fifth for free election from the seven groups, but in every case work in at least five groups should be chosen.

CLASS "C" OR TWO-YEAR HIGH SCHOOLS.

Minimum Requirements:

One two years' course.
One teacher qualified and efficient.
Library adequate—dictionaries, charts, maps, reference books, etc.
Laboratory adequate to science offered.
Sanitary toilets.
Permanent records kept.
A Community Center for literary, social and civic life of community.
A coordinate part of the County High School system.
Eight units offered:
- English, 2 units.
- Mathematics, 1 unit.
- History, 1 unit.
- Science, 1 unit.
- Electives, 3 units.
- Total, 8 units.

The electives may be:
- One additional in History.
- One additional in Science.
- One additional in Mathematics.
- Two in vocational or avocational subjects.
- Two in foreign languages.

Suggested Curriculums.

First Year.

English, 1 unit.
Mathematics, 1 unit.
Physical Education.

Select two:

History.
Foreign Language.
Science.
Vocational Subject.
Avocational Subject.

Second Year.

English, 1 unit.
Mathematics, 1 unit.
Physical Education.

Select two:

History.
Foreign Language.
Science.
Vocational Subject.
Avocational Subject.

OR

First Year.

English, 1 unit.
Composition, grammar.
Classics.
Arithmetic, algebra, 1 unit.
Science or Foreign Language, 1 unit.
Community Civics, 1 unit.
Physical Education.

Second Year.

English, 1 unit.
Composition, grammar.
Classics.
Algebra, geometry, 1 unit.
Science or Foreign Language, 1 unit.
History, 1 unit.
Physical Education.

The important thing, the vital thing, is to relate the course as much as possible to the needs of the pupil. Whatever course may be selected, care should be taken to preserve its continuity and to relate it to the work of the schools in the "A" and "B" classes in the county.

Class "C" schools should not attempt too many subjects, but confine their work to the subjects they can do well. Thoroughness and efficiency should be the aim.

CLASS "B" OR THREE YEAR HIGH SCHOOLS.

Minimum Requirements:

Teachers—qualified and efficient.
One three years' course.
Term 36 weeks.
Library adequate.
Laboratory adequate to science work.
Sanitary toilets.
Permanent records kept.
A Community Center for the literary, social and civic life of the community.
A coordinate part of the County High School system.
Twelve units offered:

English, 3 units.
History, 1 unit.
Mathematics, 2 units.
Science, 1 unit.
Elective, 5 units.
Total, 12 units.

This course should have the full time of two teachers, although it is possible to teach with one teacher giving full time and one half time.

Electives:

An additional unit in mathematics.
Two additional units in science.
One or two units in vocational work.
Two or three in history and civics.
Two or three units in Foreign language.

Suggested Curriculums.

First Year.	*Second Year.*	*Third Year.*
English, 1 unit.	English, 1 unit.	English, 1 unit.
Mathematics, 1 unit.	Mathematics, 1 unit.	Select three:
Select two:	Select two:	Mathematics.
General Science.	Civic Biology.	Physics or Chemistry.
Foreign Language.	European History.	Modern History.
Civics or History.	Foreign Language.	Foreign Language.
Vocational subject.	Vocational Subject.	Vocational Subject.
Avocational Subject.	Avocational Subject.	Avocational Subject.

Physical education thirty minutes daily in all courses.

CLASS "A" OR FOUR YEAR HIGH SCHOOLS.

Minimum Requirements:

One four years' course.

Two teachers, preferably more, but this is the minimum required.

Teachers—qualified and efficient. One should hold a degree from a standard college. Others should have this qualification or, at least, a professional high school certificate.

Library containing encyclopædias, standard dictionaries, reference books for all subjects taught and an adequate number of books for general reading. Duplicate copies of important reference books.

Laboratory. Equipped with a sufficient amount of apparatus to meet the needs of all pupils in all sciences taught.

Charts, maps—adequate.

Sanitary toilets.

Permanent records of each pupil.

It is impossible to estimate the cost of adequate apparatus, as the apparatus or the amount of it should depend upon the experiments given. These vary with the teacher or the text used. Care should be taken to relate the experiments as much as possible to the social needs, as time is often sacrificed with experiments that seem to have no aim except skill in manipulation. See lists of firms handling apparatus given under the heading Physics and Chemistry.

Curriculum Arranged for a Four Year High School With Two Teachers Only.

This course permits no electives and requires alternations.

The alternations are denoted by the figures preceding the subjects. 1 alternates with 2, 3 with 4, 5 with 6, 7 with 8.

This course gives six recitations to each of the two teachers.

First Year.	*Second Year.*	*Third Year.*	*Fourth Year.*
English	English	3 English	4 English
Algebra	Geometry	5 Modern History	6 American Hist.
General Science	2 Ancient History	7 Chemistry	8 Physics
1 Civics or History	Agriculture or Science	Foreign Language	Foreign Language.

The average high school should have more than two teachers, but inasmuch as the minimum for a four year high school has been prescribed in the Barrett-Rogers Act, the above schedule is submitted merely as a suggestive one. Many other combinations and alternations are possible, but alterations, if possible to prevent, are not as a rule advisable.

A Suggested Course of Study for Class "A" or Four Year High Schools.

Eighth Grade.

English.
History.
Mathematics.
Physical Education.
Music.

Select One:

Latin.
Science.
Vocational Subject.
Avocational Subject.

Ninth Grade.

English.
History.
Mathematics.
Physical Education.
Music.

Select One:

Latin.
Science.
Vocational Subject.
Spanish or French.
Avocational Subject.

Tenth Grade.

English.
History.
Mathematics.
Physical Education.
Music.

Select One:

Foreign Language.
Science.
Vocational Subject.
Avocational Subject.

Eleventh Grade.

English.
History.
Science.
Physical Education.
Music.

Select One:

Foreign Language.
Mathematics.
Vocational Subject.
Avocational Subject.

Principals should consider the continuity of subjects, and as far as possible provide for at least three majors in three of the seven groups and two minors in two other groups. Eight units of the course should be made up of constants. About three units should be determined by the particular needs of the individual and the others should be taken as free electives.

THE SEVEN GROUPS OF STUDIES.

English, Mathematics, History and Social Science, Natural Sciences, Foreign Languages, Vocational and Avocational Subjects.

GROUP I. ENGLISH.

ENGLISH: (Four years should be offered.)

Noting the aims of the course, the teacher of English must be conscious of the fact that she has perhaps the most wonderful opportunity of any high school teacher to mould through the teaching of this subject the aspirations and the ideals of the pupil. Animated by such a thought, she should endeavor to make her teaching vitally inspiring and inspiringly vital to those committed to her care.

Teachers are often confused as to the course in English because it includes Spelling, Composition, Grammar, Rhetoric, the Classics and Literature. Perhaps their difficulty may be solved as to the interrelation of these if they keep in mind the fact that logically the course resolves itself into only three phases, viz: "The study of the theory of good composition, the practice of good composition, and the study of good composition of others. Practically these may be resolved into the common division of composition and literature, remembering, however, that oral expression is a part of composition."

The aims of High School English are well expressed in the report of the N. E. A. Committee on Reorganization, as follows:

Composition: "The chief aim of composition teaching is to develop the power of effective communication of ideas in both speech and writing. It involves guidance in gathering, selecting, organizing and presenting ideas for the sake of informing, persuading, entertaining or inspiring others.

"It recognizes that good speech demands a sense for established idiom, distinct and natural articulation, correct pronunciation, and the use of an agreeable and well managed voice; that good writing demands a large vocabulary, a clear and vigorous style and firmness and flexibility in the construction of sentences and paragraphs; also correctness as to details of forms, namely, a firm and legible handwriting, correctness of grammar and idiom, and observance of the ordinary rules for the use of capitals and punctuation."

Literature: "The aims of literature teaching are to quicken the spirit and kindle the imagination of the pupil, open to him the potential significance and beauty of life, and form in him the habit of turning to good books for companionship. It involves guidance in gaining a clear first impression of a good book as a whole, the thoughtful consideration of parts in relation to the whole, and a vivid realization of both the whole and the part in terms of the reader's own experience and imagination. It recognizes that good reading requires a definite understanding as to the purposes to be realized by the reading, whether only knowledge of

the essentials, intimate familiarity with details or acquaintance with certain selected facts; the habit of careful observation, reflection and organization; and in the case of oral rendering an accurate and sympathetic interpretation of the meaning through well controlled voice and manner."

NOTE: As to what the course in English in the high school should be depends very largely upon what has been done in the grades. This subject begins in the first grade, and the work in the high school is merely a continuation of the work in those grades, hence it is very necessary that the teacher acquaint herself with the work that has preceded. Articulation with the work below is of the greatest importance, as the work should be "continuous in arrangement and cumulative in method and result."

ALLOTMENT OF TIME.

"In all grades from the first to the twelfth composition and literature should be equally emphasized and should receive an equal share of time."—Inland Empire Report.

ATTAINMENT OF PUPILS.

In beginning the work in high school English the teacher should make tests in composition, oral and written, to ascertain what standards have been attained by the pupils she is to teach. See Report on Reorganization as to the attainments of pupils beginning high school work.

POINTS TO BE STRESSED.

During the entire course insist upon the following:

1. In oral work:
   a. Erect position, clear enunciation, natural pitch of voice.
   b. Complete sentences grammatically correct.
   c. Reading that can be distinctly understood by all the class with books closed.
2. In written work:
   a. Spelling—at least 95 per cent perfect in all words drilled upon in the grades and in present work.
   b. Grammar—the application of grammatical principles learned, wherever they apply in the correction of grammatical errors; in securing sentence betterment.
   c. Punctuation and Capitalization—as related to sentence organization; for all abbreviations, proper names, titles, letter forms, etc.

ORAL COMPOSITION.

Teachers often make the mistake of thinking that the principal work in composition is the written form and that this is the only kind of composition that they need to give especial attention. As a matter of fact

verbal expression is more important than written, and oral and written composition should be emphasized in the proportion they play a part in the lives of the people. We should insist upon more and better oral composition to the end that the pupil may learn to collect and organize material for oral discourse, to develop ability to join in oral discussion and to present forcefully and clearly the material he has organized. "Writing and speaking are simply two forms of one mental act and speech is the typical form of expression."

WRITTEN COMPOSITION.

Teachers will succeed or fail in their teaching of composition in proportion to the attention they give to the selection of composition subjects. No one can write effectively when he has to say something—all can write when they have something to say. First ascertain that the pupils have something to say—real content to express. Then provide the motive for saying it—motivation. Teach pupils to organize what they have to say so that they may think clearly and present the work in an interesting and an impressive manner.

SUBJECTS FOR COMPOSITION

These should be taken from the everyday interests of the pupil, from leisure interests, student activities, and special projects. They should be given work in the following forms:

Narratives of fact, as stories of a football game, accidents, outings, adventures, etc.

Invented stories—fiction, imaginary journeys, adventures.

Description—Stressing the necessity of clearness and vividness in the picture.

Simple exposition.

Subjects on matters of community interest.

Letter writing—friendly letters, business letters, the letter made real if possible by an actual occasion.

TEACHER'S CORRECTION OF WORK.

In correcting themes the teacher should not expect perfection. He should not criticize too many things in one composition, but give attention to one feature only, emphasizing content at first in order to show pupils that the principal aim of the composition is to have something to say rather than to give an excuse for fault finding.

Through a proper method of correction in which certain faults and not all faults are stressed, not only one but all pupils may gain knowledge and power from the correction of these faults.

Suggestions: Lists of words misspelled by pupils should be made by the teacher and constantly drilled upon. Only by continual drill can errors in spelling be eliminated.

Teach the use of the dictionary and how to use reference books. It is more important to know how to find a reference than to know the capital of Montenegro. An educated person is one who knows what he wants, where to get it and how to apply it.

NUMBER OF THEMES.

The number of themes should be limited somewhat by the teacher's capacity to read and correct, but there should be given as a minimum at least fifteen a year.

LITERATURE.

The principal aim in literature is to develop a sense of appreciation and the soulful inspiration of the pupil. While it is necessary now and then to discuss excellencies of style and literary merit, it is not necessary to tear each and every piece of literature to pieces, as is sometime done, in order to find some grammatical relation.

The great aim and end to be obtained is, as is stated in the Report of the Committee on Reorganization, "to make the home reading pleasurable and profitable, and if this is attained, the great end of all literature is attained—the use of good books as a permanent resource of life."

A certain amount of individual reading should be stressed and a method developed by which this can be checked by the teacher. Poetry and prose should be memorized from time to time. The lists for study should include the short story, lyrical and narrative poetry, the novel, the essay and the drama.

Pupils should dramatize some of the selections studied. Lists should be made by the teacher for each grade. Emphasize the work of Georgia Poets, Authors and Writers.

Three or four of the following:

For study and practice first year high school.

Irving's Sketch Book.
The Deserted Village.
Enoch Arden—Tennyson.
Whittier's Snow Bound.
A Tale of Two Cities.
Treasure Island.
Merchant of Venice.

For Outside Reading:

Kipling—Captains Courageous.
Little Women.
Scott—Kenilworth.
Burroughs—Birds and Bees.
Hughes—Tom Brown's School Days.
Bunyan's Pilgrim's Progress.

SUGGESTIONS AND COMMENTS.

Technical Grammar belongs chiefly to the high school period, but it is not expected that pupils will complete this study in the eighth grade; rather it should be a part of the English work throughout the high school years, both for study and reference in connection with literature.

Classics. In the Junior High School it is believed, that for class study a text book consisting of choice selections of the best literature will be found more satisfactory than the study of separate books as given above. Elson's Readers are prescribed in the upper grammar grades. Similar books, more advanced, can be found, such as Mims and Payne's "Southern Prose and Poetry;" Elson and Keck's Junior High School Literature, Book I for the eighth grades and Book II for the ninth grades; Payne's Literary Readings, etc.

Magazines. The pupils should read and report on articles in current magazines. The following are suggested: Literary Digest, The Review of Reviews, Current Literature, The World's Work, The American, The Saturday Evening Post.

Teachers should consult the Bulletin on the Reorganization of English in Secondary Schools and some of the following:

"The Modern High School."

"Parker's Method of Teaching in High Schools."

"Hollister's High School and Class Management."

Report of the Inland Council of Teachers of English.

Simon and Orr—Dramatization.

Carpenter, Baker and Scott—"The Teaching of English."

"The English Journal"—Chicago.

GROUP II. HISTORY AND THE SOCIAL SCIENCES.

"The study of the social sciences have for their constant and conscious purpose the development of good citizenship."

The teaching of history, civics and the other social sciences should be helpful in meeting the social-civic objective of education.

The course may extend over the entire four years and the work may be distributed as follows:

Eighth Grade — Community Civics and Projects. This should be given in an intensive way in the first year high school, as many pupils may not reach the eleventh grade, in which grade a course in general civics is offered in connection with American History. English History or Ancient History may be offered in this grade, but it is better, perhaps, to defer Ancient History to the ninth grade.

Ninth Grade—European History to 1800 or Ancient History.

Tenth Grade—World History from 1800 to the present day.

Eleventh Grade—American History and Civics.

In two and three year schools, where it is known that the majority of pupils cannot continue their work after the completion of these schools,

the teacher should readjust the course in such a way that American history is given preference over European History.

COMMUNITY CIVICS.

The community consciousness of each child should be developed in such a way that each one will feel that he is vitally related to his community. He should not only be proud of his community, but such a spirit should be developed in him that eventually the community will be proud of him because of his civic spirit. He should be taught his relation to the community and be made to feel that he individually must contribute something worth while to the community, as the future of the community depends upon and is linked with his sense of obligation to the community.

"The aim of Community Civics is to help the child to know his community—not merely a lot of facts about it such as he may have learned in the grammar school, but the real meaning of his community life, what it is for him, what it does for him, how it does it, what the community has a right to expect from him, and how he may fulfill his obligations thereto, meanwhile cultivating in him the essential qualities of good citizenship." See "Teaching of Community Civics."

Elements of welfare suggested:

I. (1) Health; (2) Protection of life and property; (3) Recreation; (4) Education; (5) Civic beauty; (6) Wealth; (7) Communication.

II. How governmental agencies are conducted, how they are financed, and how private agencies are conducted and financed. See Report of the National Committee on Reorganization.

HISTORY.

Suggestions and Comments: Five things are necessary in the teaching of history—teacher, pupil, recitation, reference material, and illustrative material. Too often the last two are omitted.

The teacher is not only to know her subject, but she should know it so well that she can emancipate herself from following slavishly the textbook. The teacher who knows her subject is inspired by the joy of mastery, and this inspiration she always brings to her pupils. In no other subject except, perhaps, in the teaching of literature has she a greater opportunity for real good than in the teaching of history. Here, too, for the first time the teacher has the opportunity to emancipate the pupil from absolute dependence upon the text. He is at an age when he worships the heroic, when he begins a search for ideals. Help him to find the right heroes and divert him to the right ideals, not by always lecturing, but by directing him to source materials. So teach him to investigate that he will be able to amplify the work of the text and thereby develop a sense of self-reliance and independence.

RECITATION.

The purpose of the recitation is not entertainment; it is not the repetition of words memorized from the text; it is not merely the testing of what the pupil may have learned. It is more than this. The recitation should not only be a clearing house for information, facts, ideas, and opinions as they may have been collected, but it should be a time when the teacher should definitely know that the proper mental activity and right reactions have taken place in the minds and souls of the pupils.

THE TEXT AND REFERENCE MATERIAL.

The text which is used as a basic book for the teaching should by no means be the only book in the teaching of history. There should be reference books for each history taught. The library should contain historical works, magazines, charts, maps, atlases, and an encyclopædia, so that the child may have the best possible opportunity for securing sidelights and additional information on the topics studied.

ILLUSTRATIVE MATERIAL.

In addition to the above there should be illustrative materials wherever possible, such as models, pictures, casts, lantern slides, etc.

NOTEBOOKS.

Notebooks should be used, but the pupils should not be too much burdened with mechanical labor. The purpose in using notebooks should be definite—the outlines developed and certain generalizations not merely reproductions from the texts.

METHOD.

History should not be merely a study of past events. A study of conditions in the past, political and social, must be made if the study is to become vital. The pupils should relive for a time the lives of those gone before by a proper study of the conditions then existing.

Pupils may, in groups or individually, be assigned certain topics and asked to report on these as contributions to the recitation, and the time used profitably without any reference to the textbook.

Do not permit generalizations without a broad basis of fact. Remember, the perfect work is done not by merely teaching the lives of the great and good—it is a perfect work only when we can lead pupils to appreciate and to assimilate, if possible, the virtues of those of whom they read.

The teacher should constantly strive to develop the historic spirit and should read largely of the latest publications in reference to the subject.

He should read the report of the National Committee on Social Studies which has been printed by the Bureau of Education and which can be had for 10 cents from the Bureau of Documents, Washington, D. C.

The Teaching of Community Civics—bulletin No. 23, 1915, from the Bureau of Education.

The Reorganization of Secondary Education.

Training for Citizenship.

The above may be had from the Bureau of Education, Washington.

Some of the following should have a place in the library:

Bryce's American Commonwealth.

Old Greek Life.

Johnston's or Abbott's Napoleon.

Green's Short History of the English People.

The World's Almanac for the Current Year.

Maps and Charts may be had from the following:

Clanton & Webb, Atlanta, Ga.

Atkinson, Mentzer, Chicago.

Rand-McNally Co., Chicago.

Southern Pub. Co., Dallas, Texas.

The Census Bureau publishes free a Statistical Atlas of the United States which is valuable to classes in industrial history.

GROUP III. MATHEMATICS.

Four units may be offered.

The following constitute the subjects of the course: Arithmetic, Algebra, Plane Geometry, Solid Geometry, and Trigonometry.

The following suggestions are offered as to the arrangement of courses:

For two year high school two or more arrangements are possible:

a. One-half year of business arithmetic, to be followed by a year and a half of algebra.

b. One year of algebra, followed by a year of geometry.

For three year or class "B" schools the following arrangements are possible:

a. One-half year of arithmetic, followed by a year and a half of algebra and a year of geometry.

b. A year and a half of algebra, followed by a year of geometry, and then a half year of advanced arithmetic or advanced algebra.

c. One year of algebra, one year of geometry, another half year of algebra, followed by advanced arithmetic, solid geometry or advanced algebra for a half year.

For class "A" or four year schools many arrangements are possible. Algebra can be given from 1 to 2 units credit; geometry, 1; Solid Geometry, ½; Trigonometry, ½; Arithmetic, ½; not over 4 units offered. In developing the course the teacher should consult the needs of the majority of pupils.

In the average high schools it is perhaps better to give one-half the first year to arithmetic and much attention to a study of business forms, etc. The algebra may begin about the beginning of the second term of

the first year. Inasmuch as First Year Latin is generally begun at the beginning of the first term of the first high school year there will be the advantage of not introducing the pupil to too many new subjects at the same time if algebra is begun at the beginning of the second term of the first year. The algebra may be continued for a year and one unit's credit will be allowed if the work is such in quantity and quality as to warrant it. The second half of the second year geometry may be begun. This can be completed—five books—by the middle of the tenth grade, when, if desired, another unit of algebra can be offered. The eleventh year mathematics as a rule should be elective, those going to college making the necessary arrangements, those taking the Teacher Training Course reviewing the previous work in arithmetic, etc. Every pupil should have instruction in accounts, and business forms, for too often pupils finish school with little or no knowledge in reference thereto.

ALGEBRA, 1 TO 2 UNITS.

In order to secure a credit of one unit pupils should master the topic usually presented up to and including quadratics. In order to do this there is need of certain modifications and omissions. Factoring should be limited to the standard forms, complicated complex fractions being omitted. The treatement of square and cube root may be limited, but should be accompanied by explicit numerical calculations, applications, mensuration and, if possible, the construction of small tables of squares and square roots. The equation should be used early and constantly. The four fundamental operations for monomials and polynomials, signs of grouping simple equations, with the stress on the idea of balance rather than transposition. In order to secure more than one unit credit the work must be continued, the elements completed, quadratics mastered, the binominal theorem, ratio and proportion, graphical representation of two variable quantities and a practical use of logarithms, fractional and negative exponents, etc., are to be taught.

ADVANCED ARITHMETIC.

This work should not be divorced entirely from algebra and geometry. Practical problems, however, should be the rule—those relating to business, to plans for houses, emphasizing applications in mensuration, etc. Pencentage should be shown to be a special case of fractions; business forms should include forms of checks, drafts, special attention being given to a study of interest tables, insurance and freight and postal rates, etc.

GEOMETRY.

By the study of geometry the pupil should be led to a practical knowledge of form and measurement of lines and plane figures, the relations that exist between these, and to develop habits of order, neatness, and concise expression. It should teach him definiteness in aim and achievement, order and system. Insistence upon these, however, should not

be carried to the point of bewildering the pupil and rendering the subject unintelligible. In addition to the text used it is well to have in the hands of the teacher a supplementary book containing concrete questions and problems. The whole work should be made as complete as possible, so that every phase should be understood in its practical relations. Original demonstrations should form an important part of the work.

Trigonometry and Solid Geometry. These are not required, but may be given during the fourth year of the high school. Credit, ½ unit to each.

Schools desiring to do so may use the new order of mathematics in the eighth and ninth grades—a combination of arithmetic, algebra and geometry—and specialize in the more advanced texts in the tenth and eleventh grades.

GROUP IV. SCIENCE.

THE NATURAL AND PHYSICAL SCIENCES.

At least one unit in Science is required in all courses even in Class "C" or two year schools. The course may include the following, not necessarily all of them:

General Science.
Civic Biology.
Botany.
Physiography.
Physiology.
Physics.
Chemistry.

The course should generally be offered as follows:

First Year, General Science; Second Year, Civic Biology; Third Year, Physics or Chemistry; Fourth Year, Chemistry or Physics.

If desired the course in General Science may be shortened to a half year's course and Physiography given for the other half in the first year; or Biology may be offered for the first half of the second year and Physiology given in the second half of this year.

Selection and Organization of Subject Matter in General Science.

"The subject matter of General Science should be selected to a large extent from the environment. It will therefore vary greatly in different communities. The science involved in normal human activities, and especially the science involved in the Reconstruction period after the war, presents many real problems which must be met more intelligently than formerly if there is to be the needed increase in effectiveness of the service which individuals and groups are expected to give. Science is universal and constant in the life of our citizens, and hence to be useful to all pupils general science must accept the science of common things as its legitimate field. The science of common use

and that of the school room should be the same. General science should use any phase of any special science which is pertinent in the citizen's interpretation of a worthwhile problem.

The particular units of study should be those that truly interest the pupils. Interest not only secures productive attention but is an evidence of attention. To be substantial educationally, interest must rest upon a sense of value, an evident worthwhileness in the topics considered."—National Committee on the Reorganization of Science.

General Science, Physiology and Civic Biology are not strictly laboratory subjects, yet they are informational courses requiring illustration and therefore certain materials are needed.

The following are examples of the simple materials needed: copper wire, zinc and iron plates, hand lens, dry cells, hydrochloric, sulphuric or nitric acid, mercury, magnets, glass tubing beakers, test tubes, flasks, alcohol lamp, meter stick, spring balances, pulleys, levers, scissors, thermometer, mirror, prisms, etc. Pupils may supply many necessary articles that can be adapted to the needs of the class. Schools that teach Physics and Chemistry will not need additional apparatus for General Science.

The following apparatus may also be provided:

General Science Apparatus:

1 balance horn pan.
1 set weights.
1 ring stand—3 rings.
1 round bottom flask.
3 Florence flasks.
3 funnels, 2, 4 and 8.
8 one hole stoppers—rubber.
1 iron forceps.
1 meas. cylinder 50cc.
1 brass globe for weighing air.
2 thermometers 110 C.
2 thermometers Fahrenheit 220 F.
4 thistle tubes, straight stem.
2 battery jars.
1 pinch cock screw compression.
1 electric bell.
1 electrolysis apparatus.
2 battery jars 6x8.
2 glass prisms.
1 spool linen thread.
1 spool copper wire No. 18.
2 sq. ft. dental rubber.
6 tin pans 7 in. diam.
6 squares iron gauze 10cmsq.
1 set beakers, 150 cc to 1000 cc.
4 wide mouth bottles, 2, 8, 16, 32 oz.—1 each.
1 rat tail file.
1 triangular file.
2 blast lamps if no gas is provided.
Glass tubing 7 mm outside diam.
8 two hole stoppers.
1 measure cylinder 250cc.
6 test tubes.
2 lb. mercury.
Marble chips.
100 13 filter papers.
6 magnifiers.
2 pinch cocks.
1 barometer tube.
1 dry cell battery.
2 bar magnets.
1 horse shoe magnet.
1 hard glass test tube.
6 drinking tumblers.
6 candles.
4 lamp chimneys.
1 exhaust and compression pump.
1 wing top burner attachment.

The cost of the above will be about $50.00.

Chemicals: hydrochloric acid, sulphuric acid, alcohol amonium hydroxide, carbon disulphide, charcoal lumps, copper sulphate, ether, gasoline, hydrogen peroxide, iron filings, lime water litmus paper, paraffin, phosphorous, potassium chlorate, potassium permanganate, starch sugar, cane and grape, zinc and zinc sheet. The above may be secured from the W. M. Welch Company of Chicago, The Central Scientific Company of Chicago, The L. E. Knott Company of Boston, The Thomas Scientific Company of Chicago, Schaar and Company of Chicago.

SECOND YEAR. BIOLOGICAL SCIENCE, INCLUDING HYGIENE.

The course may be given for a whole year or a half year and physiology studied during the second half of the year. However the subjects may be presented, much attention should be given to Hygiene in an extended study of human physiology. Studies in Home Care of the Sick and First Aid may be given.

Especial stress should be placed upon the following:

The structure of the body, food and digestion, the circulatory system, its function and hygiene, the respiratory system, the excretory system, the sanitation of the home, sanitation of the school, sanitation of the community, pure food, water, milk, sewage disposal, playground, insect pests—the mosquito especially, quarantine, vaccination.

PHYSICS, CHEMISTRY. 1 UNIT EACH.

Physics or Chemistry may be taught in the tenth and eleventh years. Some schools will find it preferable to use Chemistry in the tenth and Physics in the eleventh.

At least two of the five periods of time given to these subjects weekly should be laboratory periods for individual experiment. The equivalent of one period a week should be given to experimental demonstration by the instructor.

The National Committee on Reorganization says: "The unit of instruction, instead of a certain number of sections or pages of the text-book or a certain formal laboratory exercise, should consist of a definite question, proposition or problem or project set up by the class or the teacher.

This method calls for an organization in which information, experimental work and methods of attack are all organized with reference to their bearings on the solution of the problem.

The recitation, the laboratory lesson and the class demonstration should not be unrelated units."

The Committee further says: "The number of laboratory problems per year should lie somewhere between thirty and fifty, the preference being given to the smaller number. Each pupil should be required to keep a note-book record of all his experiments. The notes should be clear, concise and systematically arranged. They should contain a statement of the problem, a brief description of the apparatus, materi-

als and procedure, tabulations of numerical data, the conclusions reached. Graphs and drawings should be used as a means of expression or interpretation, not as ends in themselves. Original notes should be made with such care that copying of notes will be unnecessary. The apparatus should be selected in accordance with the experiment performed.

Some dealers in apparatus and laboratory supplies: W. M. Welch Scientific Company, 1516 Orleans St., Chicago; L. E. Knott Co., 15 Harcourt St., Boston, Mass.; McIntosh Steriopticon Co., 35 Randolph St., Chicago; Kewanee Manufacturing Co., Laboratory Furniture, Kewanee, Wis.; Baush and Lomb Optical Co., Rochester, N. Y.

Note: The Chemcraft outfit can be purchased for $5. It supplies apparatus, chemicals and instructions for 130 interesting experiments. In the rural school it would be well for the individual pupil to own one of these sets. They can be had from the Milton-Bradley Company of Atlanta, or from the Porter Chemical Co., Hagerstown, Md.

GROUP V. FOREIGN LANGUAGES.

Latin—This subject is classed not as a "constant" but as a variable. This course may extend over the entire four years with the work distributed as follows:

Eighth Grade—First year spent in mastering the elements as given in some good text.

Ninth Grade—Caesar or an equivalent with prose composition.

Tenth Grade—Cicero or an equivalent with prose composition.

Eleventh Grade—Virgil or an equivalent with prose composition.

If Latin is offered it should be given for at least two years. Pupils preparing for a college of Liberal Arts may do well to pursue the subject for the entire four years.

The equivalent of four books of Caesar should be offered, six orations of Cicero, and six books of the Aeneid.

The value of Latin in building up an English vocabulary, in cultivation of literary appreciation, and in the understanding of classical references should be stressed.

Success in the Latin course will depend largely upon the work that is done the first year. If the pupil is to become master of the subject he must be drilled, drilled, drilled.

Using a first year Latin text of standard class, require a mastery of the declension of nouns, the conjunctions of verbs, comparisons of verbs and adverbs, giving especial attention to the irregular verbs, sum, possum, fero, nolo, malo fio, eo.

During the first year there should be much drill on the vocabulary and several hundred words learned thoroughly. The rules of syntax should be learned and enforced. If this first year's work is well done all will be well; otherwise discouragement and failure.

In translating see that the pupil gets a clear, concise, definite idea

of what he is trying to read and see that he gives expression to it in good English. Translation in English "has become the synonym for slip-shod work and slovenliness."

The National Committee says: "There should be an abundant work, from the beginning, in rendering into Latin very easy sentences. Here much oral work in the class room is strongly recommended. The purpose of this recommendation is to assure: (1) familiarity with the important forms of the language as used in sentences; (2) drill on vocabulary; (3) mastery of the principles of syntax; (4) training of the ear and vocal organs; (5) arousing interest in the study.

Further, from the first reading lessons should, as far as possible, deal with themes distinctly classical, especially Roman legends, biographies, anecdotes and historical events. A knowledge of some of the great personages and dramatic events in Roman history ought to be required of all pupils.

The third half year should be employed in the mastery of those principles of syntax that were postponed from the first year, in increasing the pupil's vocabulary, in drill in other matters of syntax and in the reading of much easy Latin, and in review of forms of syntax studied during the first two half years.

The committee believes that better results will be gained if the continuous reading of the unmodified text of Caesar is postponed to the beginning of the fourth half year. The Latin reading of the second and third half years should consist of dramatic episodes, easy descriptive and narrative passages from Nepos, Caesar, Livy and similar authors dealing with classical history, mythology, civilization, etc. The traditional practice of reading the Gallic War, Books I-IV consecutively and nothing else, is not recommended.

Beginning with the fourth half year, not less than one fifth of the recitation time should be devoted to a review of the forms already studied, to the mastery of such additional forms as may be necessary, to carefully graded lessons in Latin prose composition, and to systematic instruction in word formation and derivation. The Latin readings should consist of selections from Nepos, Caesar's Gallic War and Civil War."

Three or four excellent second-year Latin books have appeared recently from the press of the leading publishers. Latin teachers are advised to examine these and introduce them in preference to the old three-book-course of Caesar's Gallic War, Latin prose and composition and a Latin grammar. In the third and fourth years where Latin is elected the work may be devoted to Cicero's orations and essays, selected letters and to Sallust, or part of the time to Cicero and part to Virgil. As a general rule, we have not found it possible for our high schools to accomplish thoroughly the old requirements of four books of Caesar, six orations of Cicero, and six books of Virgil during the four-year course. It is much better to distribute the three and one half units over the four years and give the pupil a greater mastery of

the language. There are cases, however, where it can be done and well done.

MODERN LANGUAGES.

Any of the modern languages may be offered for one, two, three or four years. They may, if desired, be begun before the seventh grade is completed.

Drill in pronunciation should be begun with the first lesson, and continued. The mastery of the rudiments of the grammar, ability to translate simple sentences, and to express the idioms of the language studied, ability to understand simple sentences expressed orally in the language used, the development of a vocabulary and ability to construe should be the work of the first year. This year's work should be most thoroughly done.

GROUP VI. VOCATIONAL SUBJECTS.

It is earnestly desired that wherever the teaching staff is sufficiently large, that some one or more vocational subjects be offered in order to bring the schools closer to the real lives of the people. The times have changed since ever boy could learn his trade at home, or the girl be taught household arts as they once were. Inasmuch as many pupils are to enter industry rather than professional life, the time is here when the schools should give more emphasis to this fact and make an effort to meet this end.

Vocational Smith-Hughes courses are treated in another section of this Manual.

Schools developing courses in any of the following will receive the encouragement of the State Department of Education.

Agriculture from one to four years.

Home Economics from one to four years.

Manual Training from one to four years.

Commercial Training, including instruction in commercial arithmetic, commercial geography, business forms and practice, banking, typewriting, stenography, etc.

Music is encouraged in all schools. See "Music in Secondary Schools," Report of Committee on Reorganization.

Especial attention is called to the fact that in the future certain schools upon application to the State Department of Education, may be given the privilege of developing a Teachers' Training Course, under the conditions set forth upon page 285.

The place of all these subjects in the high school curriculum has been justified. The question now is to see that the ones that are offered are taught in a thoroughly practicable and useful way. School authorities should make a survey of their communities and find the paramount need as related to vocations and strive in the curriculum to meet that need. Undoubtedly Agriculture and Home Economics represent the

dominant interests of our people and should wherever practicable be given attention in the course of study.

AGRICULTURE.

In Class "B" and "C" schools in village and rural communities at least one half year of Agriculture in connection with corn, pigs, or other agricultural clubs should be given. This may be given in two double periods a week of school work and the projects on the home farm or garden. By thus cooperating with the County Demonstration Agent very satisfactory teaching in Agriculture can be given in these schools. The Bureau of Education Bulletin in Agriculture will be helpful for classes other than the Smith-Hughes classes. See fuller treatment under Vocational Education.

Home Economics Other Than the Vocational Smith-Hughes.

At least one year of Home Economics should be a part of the course of every high school girl. This can be given successfully by the use of the Home Demonstration Agent for suggestions in home projects and by one of the elementary teachers. Two double periods a week in class demonstration and practice with reports on same will constitute a unit or year's work, or four double periods of school work, without home projects.

In the Class "A" schools a more intensive course may be given with a special Smith-Hughes teacher employed. These courses are described elsewhere in this Manual under Vocational Education. See also General Home Economics for High Schools.

COMMERCIAL COURSES.

These are gaining in favor in the four year high schools in communities where the population is largely commercial. The report of the National Committee on "Business Education" published by the Bureau of Education gives an exhaustive treatment of this subject.

MANUAL TRAINING.

Schools wherever practicable should offer one or more years in eighth or ninth grades, or both.

GROUP VI. TEACHER TRAINING.

In offering teacher training in the high schools, the state does not desire to convey the idea that it expects to turn out teachers as well qualified as if they attended a normal school or a teachers' college. It is possible, however, for nearly every county to organize a training department in connection with the best high schools, so that in a few years each rural school will be supplied with teachers who have four years' work in a high school and also a year of professional training.

The work will only be entrusted to schools that have the endorsement and approval of the Department of Education, and only such students will be accepted for this course as can command the recommendation of the principals of the schools which they attend.

COURSES OF STUDY FOR TEACHER TRAINING CLASSES.

Fourth Year—First Quarter: September, October, November: Theory.

A study of "The Science and Art of Teaching," LaRue, the American Book Company.

There should be frequent observations and tests in the school grades to illustrate the text, and the principles should be applied constantly during the second and third quarters' work.

Fourth Year—Second Quarter: January, February: Practice.

Study of the State Manual, with observations and practice teaching of the various subjects with groups and whole grades.

Third Quarter: March, April, May: Review Course.

A review with intensive study of advanced Arithmetic, Grammar, Geography, and American History and Civics. There should be a review of the year's Teacher Training course in this last month. Students will be given administrative duties in supervising children; practice in making out reports, schedules, programs, lesson outlines; in presiding over meetings and assisting grade teachers.

In the second or third quarter there should be observation and practice work, if possible, in a rural school, with the approval of the County Superintendent and teacher.

GROUP VII. AVOCATIONAL OR EXTRA-CURRICULUM ACTIVITIES.

Since one of the objectives of education is the proper use of leisure time, the school should assume some responsibility for training in the proper use of the leisure time of the pupils.

Extra-curriculum activities are often quite valuable to a school and may, if properly handled, enlist the interest and support of the whole community. These activities relate to the work of the literary and other associations within the school; to the work of other organizations cooperating with the school and in which the public have a part. Activities of this kind extend the avocational or social side of the pupil's life and often develop what every school should have—a good school spirit. The school should therefore encourage, if not support and accept responsibility for:

1. The school as an evening recreation center.
2. The development of children's gardens.
3. Athletic badge contests among the pupils.

4. Arrangement for celebration of holidays.
5. Arrangement of pageants.
6. Cooperation with Boy Scouts, "Hi Y," Camp Fire Girls, American Red Cross in organization of Junior Red Cross, Y. W. C. A., Community Service and other organizations that would extend the social life of the community.
7. Wholesome home recreation; promotion of plays and games away from school grounds.
8. School Athletics: Baseball, basketball, football, volleyball, etc.

References: "Games for the Playgrounds"—MacMillan; "Neighborhood Entertainments"—Stringer and Watkins; "The Social Center"—Ward; "What It Is and How to Organize"—Government Printing Office.

"Recreation Manual for Teachers"—Oregon State Department of Education and Georgia Health Manual for Schools.

"The Consolidated School"—Rapeer.

"Play and Recreation for the Open Country"—Ginn & Co.

THE HIGH SCHOOL AS A SOCIAL CENTER.

If high schools are to wield the widest influence, we should see that at stated intervals they are open to the general public, and made the place of assembly for all the people of the community. Our people will never be properly awakened to the needs or the importance of the schools until in some way we bring them into closer touch and contact with the people and thus vitally connect them with the schools.

Here is a great opportunity for a real live principal to enlist the entire community as one in the support of the schools. He can utilize this opportunity by calling together the members of the community from time to time as occasions for entertainment and discussions of the needs of the community, for literary and social exercises, and the development of the community spirit through such discussions, entertainments, and community singing, etc.

A debate between the pupils of the school, a talk by the County Superintendent, the Agricultural or Demonstration Agents, by leaders of the community; now and then a movie picture along educational lines; these interspersed with music and discussion should enlist the interest of the whole community, and, if handled properly, will transform the spirit of the whole community. Appropriate subjects for discussion are as follows:

The problem of our roads.

The kinds of waste on the farm; in the home.

How to exterminate the typhoid or common house fly.

Our most dangerous animals—the fly and the mosquito.

The life story of the mosquito. Movie pictures may be furnished by the State Board of Health and Southern Division American Red Cross

The value of playgrounds for children.

Reading matter for the community.
Boys' and girls' clubs.
How to use the extension department of the University.
Relation of water supply to contagious disease.
Things everyone should know in reference to local government. Coop rative marketing.
Why farmers move to the city.
Modern farm conveniences.
How to improve production.
References: Rapeer—"The Consolidated School."
"Wider Use of the School Plant"—Charities Pub. Co. of New York.
Curtis—"Play and Recreation for the Open Country"—Ginn Co.

When the community is properly organized and the social center problem is handled wisely the school will be brought close to the hearts of the people, the patrons pleased, the teachers made happy and a real pride on the part of all towards the school will be developed.

THE STATE AIDED SCHOOLS.

The purpose of the Barrett-Rogers Act is to encourage the development of high schools in counties, not now having four year high schools. The results have been most gratifying, as sixty-three counties have met the requirements and the state has today sixty-three high schools that have qualified under this Act.

The following are the regulations in reference to their approval:

1. The high school receiving state aid must be under public control and must have four high school grades above the seventh grade.

2. There must be at least two teachers for the four grades. At least one of the teachers should possess a degree from a standard four year college.

3. Applications for state aid must be made on official blanks, prepared by the State Department of Education.

4. Accompanying the application there should be a sketch of the county showing the relation of the proposed state aided high school to the other schools of the county and the plan for the probable development of the high schools and the related elementary schools.

5. The application must be approved by the State Department of Education after investigation of the school, and an official report made thereon.

6. Preference will be given to those counties not now having four year high schools.

7. In locating the school, preference will be given to location, accessibility, building, equipment, means of support, provisions for rural pupils, transportation, curriculum, efficiency of instruction, and general intellectual and moral tone of the school.

8. The school must provide the necessary equipment, records and library required for the curriculum approved, and make such reports as may be required by the department.

HIGH SCHOOL RECORDS. GRADING, ETC.

All high school superintendents and principals are required to keep in permanent and durable form the record, class standing, etc., of each and every pupil in the high school.

The State Board of Education has adopted a system of records which will reflect the whole history of the pupil while in school.

Loose leaf files, from 100 to 200 record sheets, can be furnished to each school in the county authorized to do high school work. The individual record is filled out yearly and preserved in permanent form.

The record files, indexes, and loose leaf sheets can be secured from the McGregor Publishing Company, Athens, Ga., the authorized distributors of the adopted high school records for the state. Price $5.00.

GRADING.

Grades are entered twice a year on the permanent record from the teacher's record. "A" represents very superior; "B" represents superior; "C," medium; "D," inferior but above a pass; "F," below a pass or conconditioned failure; "FF," complete failure.

HIGH SCHOOL SUPERVISORS.

The state seeks to develop an efficient system of high schools. It seeks to do this through stimulation, supervision, state aid, and a plan of classification.

OFFICERS.

The State High School Supervisor is the liaison officer between the state and the high schools.

The Professor of Secondary Education is the liaison officer between the State University and the high schools.

FUNCTIONS OF OFFICERS COOPERATIVE.

The interests of the two converge in the development of an efficient system of high schools.

Both seek to keep the schools already accredited up to the standard, to still further improve them, and to bring others up to the physical requirements necessary, first for classification and then to the standards necessary—both qualitatively and quantatively—for accrediting.

SPECIAL DUTIES.

For the present, matters relating to accrediting should be referred to Dr. J. S. Stewart, Professor of Secondary Education.

All matters relating to high schools in general, and especially those relating to classification, state aid, etc., should be referred to the State High School Supervisor, E. A. Pound.

The State High School Supervisor cooperates with the Professor of

Secondary Education, the State Supervisors of Elementary Schools, with County Superintendents and teachers, and all to the end that there may be developed a unified system of high schools throughout the state.

THE SPIRIT OF THEIR WORK.

The Supervisors come in a spirit of helpfulness—to confer with the high school authorities; to advise, to suggest, to encourage, to stimulate, and not to criticize except in a constructive way. They wish to be helpers, not hinderers; and they ask the cooperation of all in their efforts to aid high school authorities in the development of a strong high school system that will prepare pupils—some for college, and all for the social demands of life.

ACCREDITED SCHOOLS.

The State University has built up a well-recognized system of accredited schools, accepted by all the affiliating colleges of the state for certification to college in lieu of examinations. It is hoped that all "A" class schools will secure a place on this list.

Mr. Pound and Dr. Stewart will recommend class "A" schools for accrediting, when they meet the standards required.

Colleges do not accept students on certificate, except from accredited schools. The requirements for accrediting differ somewhat from those for classification. The requirements for accredited schools are that there must be at least three teachers; three-fourths of their teachers must be graduates from standard colleges; there must not be over six recitations taught by each teacher daily; there must be satisfactory laboratories, libraries and equipment; the school must have a good record of success and have the right sort of intellectual and moral atmosphere; the buildings must be sanitary, and the maximum number of pupils in a class must not exceed thirty.

VOCATIONAL AGRICULTURE

By PAUL W. CHAPMAN, Supervisor.

The National Education Association has gone on record as being of the opinion that to train boys in some vocation should be one of the objectives of secondary education. In a great agricultural state like Georgia, which ranks fifth in the nation in rural population, agriculture will be the vocation selected by a large number of young men. Through the Smith-Hughes Act the Federal Government and the state cooperate with the local community in paying the salary of the teacher of agriculture.

Two, three, or four years' work in agriculture may be offered.

Only those pupils are eligible to enter these classes who expect to make farming their vocation. They may be either boys or girls, and must be over fourteen years of age. Each pupil taking this work must carry on some practical farm work at home. This work has come to be termed the "home project" and consists of such practical farm operations as growing cotton, corn, and potatoes; or raising poultry, cattle, or swine. This home work is carried on under the close supervision of the teacher who is employed for twelve months in the year.

Teachers of vocational agriculture must be men with practical farm experience. They must be graduates of an approved State Agricultural College, and in addition must have had professional training in Agricultural Education.

STATE AND FEDERAL AID.

One-half of the salary of the teacher of vocational agriculture is paid by the Federal Government. This money must be matched dollar for dollar, by state and local money, or by both. In addition to the one-half of the salary which is paid by the federal government, the state pays one-eighth beside other aid, and the local or county board three-eighths of the salary of the teacher of agriculture. In this way, if the teacher of agriculture were paid $2,000, the federal funds would pay one-half of it or $1,000; state funds one-eighth, or $250, and the remainder, three-eighths, or $750, would be paid by the local or county board.

The teachers are employed by the local board just as any other high school teachers; they stand in the same relation to the local school authorities, and are paid at the end of each month by the treasurer of the local or county board, just as the other high school teachers. The State Board for Vocational Education, under whose direction the Smith-Hughes funds are handled, deals with school boards and not with teachers

individually. Reimbursement, for money paid to the teachers, is made to the local school treasurer four times a year.

PART-TIME WORK IN AGRICULTURE.

The text of the Smith-Hughes Act states that this work is intended for "those who have entered upon the business of farming and those who expect to enter upon it." In the regular high school classes are generally found only those who are expecting to enter upon the business of farming; but in every community can be found a large number of young men who have dropped out of school and become farmers in the community. To instruct these young men is just as much a part of the vocational agricultural teacher's duty as the work with the regularly enrolled high school pupils.

Part-time work will not be outlined in this manual, but can be arranged at any time that the community desires it.

MAKING PROVISION FOR VOCATIONAL AGRICULTURE ON THE SCHOOL PROGRAM.

The vocational agriculture work is taken care of on the program in just the same way as any science which is taught by the laboratory method. Two periods a day, five times a week, should be set aside on the program. It is desirable to add a third period whenever possible that may be used for conference and supervised study at the option of the teacher.

The federal vocational education act requires that pupils taking the vocational work give fifty per cent of their time to it. The fifty per cent of the pupil's time devoted to vocational subjects includes a minimum of one two-hour period each day at school, and the home work required on the pupil's project. However, it is advisable to schedule the work so that the non-vocational subjects will come during one-half of the school day and the vocational subjects during the other half.

Two agriculture classes, one in the morning and one in the afternoon, is considered a full-time program for a vocational teacher. The work may be alternated so that one teacher can give all four years' work. In starting the work either two sections of the first year's work may be given, when there are a sufficient number of pupils to warrant it; or the first and second year's work may be given. No class should be conducted with a greater enrollment than twenty.

Four subjects are all that the average high school pupil can carry. For that reason any pupil taking a vocational course will be expected to carry not more than three non-vocational subjects. The following weekly schedule will be typical for any regular pupil taking vocational agriculture, regardless of their advancement in school:

PUPIL'S SCHEDULE.

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00 9:45	English				
9:45 10:30	Mathematics				
10:30 11:15	Study				
11:15 12:00	History				
12:00 12:45	Lunch				
12:45 1:30	Supervised Study				
1:30 2:15	Vocational Agriculture				
2:15 3:00	Vocational Agriculture				

(Same as Monday)

Note—Any other non-vocational subjects may be substituted for the ones given. When the vocational work is scheduled in the morning for a given class the non-vocational work should come in the afternoon. The "Supervised Study" is intended to be a part of the vocational work and under the direction of the vocational teacher.

SUGGESTED SCHEDULES.

On account of irregular pupils and a shortage of teachers it may be impossible to arrange the program so that vocational work will be given one-half of the school day. This will be especially true in two, three and four teacher high schools. The following suggested schedules may be helpful in arranging the school program. They may be found in Bulletin No. 306, University of Georgia; "Secondary Education," by Dr. J. S. Stewart.

A Suggested Schedule For a Three-Teacher Four-Year High School—Sixteen Units.

	Periods.	*Teacher A.*	*Teacher B.*	*Teacher C.*
	8:30- 8:40	Opening Exercises		History 2
1.	8:40- 9:20	History 1	Language 3–4	History 3
2.	9:20-10:00	Mathematics 1	Language 2	(and 2 labs.)
3.	10:00-10:40	Mathematics 4 (3 to 4 days)	Language 1	Consultation

4.	10:40-11:20	Supervision	English 3-4	Science 1–2
5.	11:20-11:50	Physical Training	Music and Assembly	
	Noon Recess:	(30 minutes to 1 hour, as community may desire).		
6.	12:50- 1:30	Mathematics 3	English 2	English 1
7.	1:30- 2:10	Mathematics 2	Consultation	History 4
8.	2:10- 2:50	Science 3–4	Home Economics (1–2 or 3–4)	Agriculture (1–2 or 3–4)
9.	2:50- 3:30	2 lab. for 3–4 (special work)	Laboratory	Laboratory

A Possible Schedule For a Two-Teacher Three-Year High School—Twelve Units.

Periods.	*Teacher A.*	*Teacher B.*
8:30- 8:40	Opening Exercises.	
1. 8:40- 9:20	Mathematics 1	Language 3
2. 9:20-10:00	English 2	Language 1
3. 10:00-10:40	Mathematics 3	English 1
4. 10:40-11:20	Science 2-1	English 3
5. 11:20-11:50	(2 Laboratory periods for Science 1–2)	
Assembly.	Physical Training (Avocational Activities)	
Noon Recess:	(30 minutes to 1 hour, as community may desire.)	
6. 12:50- 1:30	Mathematics 3	Language 2
7. 1:30-2:10	History 2	History 1
8. 2:10- 2:50	Science 3	Vocational 1–2 (Home Ec. & Agriculture Elective 3)
9. 2:50- 3:30	2 Lab. for Science 3 (special work)	Lab. Period for 1–2 (field work)
Figures indicate the grade.		

Schedule For Two-Year One-Teacher High School.

8:30- 8:40	Opening	
8:40- 9:10	Mathematics 1	2 Study
9:10- 9:40	English 2	1 Study
9:40-10:20	English 1	2 Study
10:20-10:50	Language 2	1 Study
10:50-11:20	History 1–2	
11:20-11:50	Assembly. Physical Training.	
11:50-12:30	Noon Intermission.	
12:30- 1:00	Mathematics 2	1 Study
1:00- 1:30	Language 1	2 Study
1:30- 2:30	Science 1–2 or Alternate Voc. Ag. & Ho. Ec. 1–2	
2:30	Dismissal	Office Work

Eight units for each pupil in the two years of not less than 32 weeks each. One election allowed. Note alternate by years in some studies.

Suggested Course of Study in Vocational Agricultural Schools.

FIRST YEAR.

*NON-VOCATIONAL.

English	Periods per Week
Grammar, Composition, Classics	5
Mathematics	
Arithmetic, Algebra	5
History	
Community History	5
Science	
General Science, Physical Geography	7

*Any three of the above may be selected.

VOCATIONAL.

Plant Life

How Plants Grow (six weeks)
Soils (twelve weeks) 10
Farm Crops (eighteen weeks)

SECOND YEAR.

*NON-VOCATIONAL.

English

Grammar, Composition, Classics	5
Mathematics	
Algebra, Geometry	5
Elective	5
Science	
Biology, Physiology, First Aid	7

*Any three of the above may be selected.

VOCATIONAL.

Animal Life	Meetings per Week
Animal Life (six weeks)	
Meat Production (twelve weeks)	10
Dairy, Poultry, Horses, Sheep (eighteen weeks)	

THIRD YEAR.

*NON-VOCATIONAL.

English
Literature 5
History
European 5
Elective 5
Science
Chemistry 7
*Any three of the above may be selected.

VOCATIONAL.

Horticulture
Fruit Growing (twelve weeks)
Gardening (twelve weeks) 10
Plant Propagation (twelve weeks)

FOURTH YEAR

*NON-VOCATIONAL.
English
Literature 5
History
United States History, Civics 5
Elective 5
Science
Physics 7
*Any three of the above may be selected.

VOCATIONAL.

Farm Management — Periods per Week
Farm Management (eighteen weeks)
Agricultural Engineering and 10
Sanitation (eighteen weeks)

SUPERVISED PRACTICE.

In connection with all of the vocational courses outlined in the four year course a home project is required. This project will be selected from the phase of agricultural work that is being studied at school. The first year the pupil will be required to grow some farm crop, the second year to raise some live stock, the third to do some orchard or garden work, and the fourth to select some problems in connection with the management of the home farm.

Vocational courses are courses of activity. They imply "doing things"

as well as studying about things. For this reason much of the work must be done in the laboratory, the shop, and in the field. This explains the reason why more time is required for such courses on the school schedule than is necessary for non-vocational work.

EQUIPMENT.

About $150 worth of equipment will be required for the first year's work in vocational agriculture. In order to stimulate interest in equipping good laboratories, and to make it possible for vocational high schools to work effectively the State Board for Vocational Education has been reimbursing schools $75 each year for each $150 worth of equipment purchased. In this way most of the schools where the work has been in the curriculum for two or three years have a well equipped working laboratory.

A separate room shall be set aside for the work. This should serve as a laboratory and recitation room combined. The room should be furnished with tables and chairs rather than desks. Good book cases, bulletin file cases, and lockers for the apparatus should be a part of the furnishings. In many schools these have been built by the members of the class.

Below is given a suggested list of apparatus and equipment, including reference books for the library, for the first two years' work. This may be purchased from any school supply company.

MINIMUM EQUIPMENT FOR TEACHING VOCATIONAL AGRICULTURE.

Apparatus For First Year's Work.

(Selected on basis of ten students.)

12	Steel Case Knives	
1	Set Soil Sieves, "6" wood frames, 20-40-60-80-100 mesh	$3.95
12	Glass Funnels, 4-inch	5.40
24	Student Lamp Chimneys	6.00
2	Soil Thermometers	5.00
6	Alcohol Lamps, 8-ounce	2.70
12	Feet Rubber Tubing, ¼-inch	1.20
12	Evaporating Dishes, 3-inch, No. C	2.52
1	Mortar and Pestle, porcelain, 4-inch diameter	.65
1	Waste Jar, 6 gallons	2.25
1	Pound Glass Tubing, ¼-inch diameter	.55
6	Books Blue Litmus Paper	.36
6	Books Red Litmus Paper	.36
3	Ring Stands, No. 2	2.55
3	Rings, 3-inch (for ring stand)	.90
3	Rings, 5-inch (for ring stand)	1.20
12	Wire Gauzes, asbestos center, 5x5	1.80
10	Tripod Lenses	10.00
10	Pair Forceps	2.50

6	Thistle Tubes	.60
36	Test Tubes, 5/8x5-inch	.78
6	Test Tube Brushes	.30
15	Pyres Breakers 250 cc with lips	1.92
2	Graduates, 10 cc	.90
3	Graduates, 25 cc	1.50
24	Pint (½) Tumblers	1.12
5	Erlenmeyer Flasks, 200 cc Pyres glass	1.20
1	Thermometer, Chemical Centigrade Scale, 110G	1.10
36	Vials, ¼-ounce Aluminum Caps	2.70
1	Harvard Trip Balance	13.50
1	Set of Weights, 1 to 500 grams	5.00
10	Tripods, 5-inch diameter	3.50
12	Triangles (clay covered), 2½-inch diameter	.90
12	Packages Filter Paper, 7.5 cm	2.04
4	Crucibles, 37 cc capacity, porcelain, No. 2	1.44
6	Cappillary Soil Tubes, 2x36	10.50
2	Glass Tubes, 1x60-inch	2.00
30	Rubber Stoppers, 2-hole, No. 2	.87
6	Crucible Tongs, 9-inch	1.32
10	Test Tube Holders	1.00
1	Soil Auger (may be made)	.25
12	Trowels	2.40
1	Pair Shears, 6-inch	1.50
72	Vials, No 2, 11 cc capacity	1.50
3	Soil Scoops, 5x3-inch	.60
1	Rolling Pin	.50
2	Counter Brushes	1.30

REFERENCE BOOKS FOR FIRST YEAR'S WORK.

Principles of Agronomy.—Harris & Stewart (text). The McMillan Co., Atlanta, Ga.
Field Crops in Cotton Belt.—Morgan. The McMillan Co., Atlanta, Ga.
Plant Life and Plant Uses.—Coulter. American Book Co., Atlanta, Ga.
Southern Field Crops.—Duggar. The McMillan Company.
Soils & Fertilizers.—Lyon (text). The McMillan Company.
Productive Farm Crops.—Montgomery. Lippincott Company.
Soils and Soil Fertility.—Whitson & Walster. Webb Publishing Co., St. Paul, Minn.
Practical Course in Botany.—Andrews. American Book Co., Atlanta, Ga.
Plant Breeding.—Bailey. MacMillan Company, Atlanta, Ga.
Fertilizers.—Vorhees (text). MacMillan Company, Atlanta, Ga.
Injurious Insects and Useful Birds.—Washburn. Lippincott Company.
Fertilizers & Crops.—Van Slyke. Orange Judd Company.
The Botany of Crop Plants.—Robbins. P. Blackeston & Son.

Apparatus For Second Year's Work.

Prints of Photographs of breeds and types of horses, cattle, hogs sheep, and poultry. U. S. D. A. Bureau P. I.

1	HD	2232	Syringe, with needles and adapters in case...	$4.50
100	HD		Ideal Ear Buttons, numbered serially, and punch	3.25
1	HD		Ear Button Punch and Pliers.....	1.25
100		9866	Leg Bands for Poultry, numbered.....	.75
1		5356	Babcock Milk Tester, iron cover, 8-bottle, with 8 milk bottles, pipette, acid measure, and 1 pound acid.....	17.50
6		5358	Milk Test Bottles, 10 per cent.....	1.40
6		5362	Cream Test Bottles, 6-inch, 50 per cent.....	
3		5363	Skim Milk Test Bottles, 1-100 per cent.....	1.80
3		5376	Acid Measure, 17.6 cc.....	.45
2		5378A	Lactometers, Quevennes, without thermometer (or 2 5377 Lactometers, $1.50).....	2.00
3		5368	Pipette, 17.6 cc.....	.60
1		5380	Dairy Thermometer, weighted to float.....	1.00
2		4712	Burettes, 50 cc.....	2.20
2		4900	Burette Clamps	.80
2		4913	Pinch Cocks	.50
12		4602	Wide Mouth Bottles, 6-ounce.....	1.10
12		4947	Corks for above bottles, No. 15.....	.55
1		9867	Killing Knife, safe edge.....	.60
1		9930	Pad Score Cards, beef cattle (50 sheets).....	.18
1		9932	Pad Score Cards, dairy cattle (50 sheets)....	.18
1		9938	Pad Score Cards, hogs, lard type (50 sheets)	.18
1		9938A	Pad Score Cards, hogs, bacon type (50 sheets)	.18
1		5384	Box (50) Farrington's Tablets.....	.30
1		5382	Box Corrosive Sublimate Tablets.....	.30
			Total.....	$42.79

REFERENCE BOOKS FOR SECOND YEAR'S WORK.

Productive Horse Husbandry.—Gay. Lippincott Company, Philadelphia, Pa.

Stock Judging for Beginners, and Circular No. 29. Perdue University, LaFayette, Ind. (Free)

Productive Swine Husbandry.—Day. Lippincott Company.

Beginnings in Animal Husbandry.—Plumb. Webb Publishing Co., St. Paul, Minn.

Productive Feeding of Farm Animals.—Woll. Lippincott Company.

Productive Poultry Husbandry.—Lewis. Lippincott Company.

Our Domestic Birds.—Lewis. Ginn & Company.

Poultry Laboratory Guide.—Lewis. MacMillan Company, Atlanta, Ga.

Milk & Its Products.—Wing. MacMillan Company, N. Y. City.

Farm Dairy.— N. B. Gurler. Breeder's Gazette, Chicago, Ill.

Productive Dairying.—Washburn. Lippincott Company.

Dairy Cattle & Milk Production.—Eckles, MacMillan Company, Atlanta, Ga. Dairy Laboratory Manual.—Anthony. (For Use in School Creameries). Lippincott Company.

Common Diseases of Farm Animals.—Craig. Lippincott Company.

VOCATIONAL EDUCATION

DIVISION OF TRADES AND INDUSTRIES.

J. F. CANNON—W. M. McLAURINE.

The Federal Government, realizing the need and demand for industrial training, through the Smith-Hughes bill appropriated certain sums of money for the advancement of the work in vocational education and also specified how it should be spent. Bulletin 17, Trade and Industrial Series No. 1, issued by the Federal Board of Vocational Education, is a complete general outline and explanation of the organization and administration of trade and industrial education. The Act provides for a state plan. This plan can be secured from the State Department of Education and it completely outlines the organization and administration in Georgia. It provides for six types of trade or industrial schools or classes, namely:

1. All-day unit trade.
2. All-day general industrial in cities (under 25,000).
3. Part-time trade extension.
4. Part-time trade preparatory.
5. Part-time general continuation.
6 Evening trade extension.

ALL-DAY UNIT TRADE SCHOOLS.

A unit trade school or class established under the Federal Act is a public school or class established and maintained in any community for the purpose of fitting persons for useful employment in a particular trade or industrial pursuit through instruction of less than college grade, (a) designed to meet the needs of persons over 14 years of age; (b) giving not less than half of the time to practical work on a useful or productive basis; and (c) extending over not less than 9 months (36 weeks) per year, and not less than 30 (clock) hours per week.

When a group of young men over 14 years of age not yet employed attend an all-day school or class for the purpose of preparing for entrance into the plumbers' trade, and when the instruction given them, both shop and related class work, is based solely upon the plumbers' trade needs, this constitutes a unit trade school or class.

In the same way, unit trade classes can be operated in carpentry, machine shop practice, auto mechanics, textiles, and any other industrial line.

The course of study will be such as to require at least 50 per cent of the time to be given to practical work on a useful and productive basis; 30 to 35 per cent of the time will be devoted to subjects related to the trade, and the remaining 15 to 20 per cent will be given to non-vocational subjects.

It would consume too much space to try to outline all the various courses that this type of school permits. Below we give two suggestive courses in machine shop practice and in carpentry.

MACHINE SHOP TYPE COURSE.

(Two-Year Course)

FIRST YEAR.	Hours per week
English and Civics, 15 per cent	4
Related Subjects:	
Shop Mathematics, Basic Operations, formulas etc.	4
Shop Drawing	4
Shop Materials	3
Machine Shop work on useful or productive basis	15
Total	30

SECOND YEAR.	Hours per week
English and Civics	4
Related Subjects:	
Shop Organization, Hygiene	1
Shop Mathematics, Speed Ratios, calculations	3
Shop drawing, shop sketching and reading	4
Applied physics	3
Machine shop practice	15
Total	30

CARPENTRY COURSE.

FIRST YEAR.	Hours per week
English and Civics, including spelling	4
Related Work:	
Shop Mathematics, basic operations	3
Shop Hygiene	1
Shop Drafting	4
Mechanics and Applied Physics	3
Carpentry work, constructive carpentry, joinery	15
Total	30

SECOND YEAR.	Hours per week
English and Civics	4
Shop Mathematics, basic operations and estimating costs	4
Shop Drawing, Blue-Print Reading, Designing	4
Mechanics and Applied Physics	3
Carpentry Work, Building Construction, Cabinet Making, Machine Operations	15
Total	30

Note: These type courses may be modified, according to local conditions in accordance with regulations.

GENERAL INDUSTRIAL SCHOOLS OR CLASSES.

A general industrial school or class established under the Federal Act is a public school or class established and maintained in any city or town of less than 25,000 population for the purpose of fitting persons for useful employment in trade or industry through instruction of less than college grade, (a) designed to meet the needs of persons over 14 years of age, and (b) giving not less than half the time to practical work on a useful or productive basis. The general industrial school is designed to meet the particular needs of cities or towns of less than 25,000 population.

If the group of boys preparing in our unit trade school had been a very small group living in a town of less than 25,000 inhabitants, it would perhaps have been impossible to provide them with a special shop and a special teacher for instruction in plumbing only.

In this case boys from other building trade groups, such as, for example, carpentry, brick laying, and plastering, might have been added to our original class, so as to form a class in the building trades rather than in any one (unit) trade.

Such a class would receive shop instruction as nearly like that of a unit trade school as possible under the conditions, and would receive instruction in related work underlying the building trades and a group—in, for instance, mathematics, estimating, structural and elementary architectural drawing, and building ordinances and regulations. This would be a general industrial school or class.

The course of study will be designed to give knowledge and skill in the common elements of the several trades in the given trade group, together with such studies as will produce a well rounded course of study. The hours of instruction will not be less than 25 hours of 60 minutes each per week, and the Board will encourage the adoption of 30 hours of 60 minutes each per week.

SUGGESTIVE TYPE COURSE FOR GENERAL INDUSTRIAL SCHOOL.

FIRST YEAR.	Hours per week
A Composite Trade: Wheelwrighting, Blacksmithing, General Repairing, Wood and Metal	12½
Arithmetic and Science related to the trade	7½
English and Civics	5
Total	25

SECOND YEAR.	Hours per week
A Composite Trade: Wheelwrighting, Blacksmithing, General Repairing, Wood and Metal	12½
Shop Mathematics and Drafting	7½
History and English	5
Total	25

PART-TIME TRADE EXTENSION SCHOOL OR CLASSES.

A trade extension part-time school or class established under the Federal Act is a public school or class established and maintained in any community for the purpose of giving instruction of less than college grade to persons over 14 years of age who have entered upon the work of a trade or industrial pursuit, which instruction shall further fit persons taking it for useful employment in THE TRADE OR INDUSTRIAL PURSUIT IN WHICH THEY ARE EMPLOYED. The instruction in a trade extension part-time school or class must (a) meet the needs of persons over 14 years of age; and (b) must be given for not less than 144 hours per year.

Thus, the plumber's apprentice before mentioned might be given the identical instruction set forth for the evening class and such instruction constitute part-time work, but only in case it is given between the hours of 8 a. m. and 5 p. m., which are assumed to be the limit of the plumber's working day. Instruction not supplementary to the plumber's trade, such as instruction in English or industrial history, could not be given in this class. Such subjects would be permitted only in the general continuation school.

The Board will make an individual study of each proposed class and endeavor to adapt the same to the individual needs of the pupils in teaching the kinds of work in which they are engaged after conference with the local advisory committee and the employers.

PART-TIME TRADE EXTENSION COURSE.

MACHINISTS.

Time Allotment:

Shop Arithmetic, ½ hour.
Shop Drafting, 1½ hours.
Shop Demonstrations, 2 hours.

a. Lathe.
   1. Study of the machine.
   2. Straight turning.
   3. Taper turning.
   4. Chucking and boring.
   5. Face plate work.
   6. Back rest.
   7. Thread cutting.

b. Speed Lathe.
   1. Filing and punching.
   2. Drilling on centers.

c. Milling Machine.
   1. Study of machine.
   2. Straight milling.
   3. Spiral head and indexing.
   4. Universal miller.
   5. Drilling and boring.

d. Shaper.
   1. Study of machine.
   2. Straight planing.
   3. Angular planing.
   4. Key way planning.
   5. Under cutting.

e. Drill Press.
   1. Study of machine.
   2. Drilling.
   3. Machine reaming.
   4. Tapping.

f. Universal Grinder.
   1. Study of machine.
   2. Machine in general.
   3. Cutter grinding.
   4. Simple cylindrical work.
   5. Surface grinding.
   6. Internal grinding.

g. Bench.
   1. Vise work.
   2. Hand reaming.
   3. Tapping.
   4. Chipping, filing, etc.

Shop Talks.
   Steel.
   Cast Iron.

Shop Organization.
   Modern manufacturing methods
   Specialization of workmen.
   Specialization of machine tools.
   Routing of work through shop.
   Interchangeable manufacture.
   Costs.

Shop Arithmetic.
   Basic Operations.
   Formulas.
   Speed Ratios.
   Simple calculations of machine operations.

Mechanical Drawing.
   Work from plates to develop knowledge of
      Projection.
      Conventions.
      Correct dimensions, etc.

Shop Sketching.
   Free hand sketches of machine parts.
   Shop drawings from sketch.

PART-TIME TRADE PREPARATORY SCHOOLS OR CLASSES.

A trade preparatory part-time school or class established under the Federal Act is a public school or class established and maintained in any community for the purpose of giving instruction of less than college grade to persons over 14 years of age who have entered upon employment, WHICH INSTRUCTION SHALL BE DESIGNED TO FIT THESE PERSONS FOR USEFUL EMPLOYMENT IN A TRADE OR INDUSTRIAL PURSUIT OTHER THAN THE ONE IN WHICH THEY ARE EMPLOYED. The instruction in a trade-preparatory part-time school or class must (a) meet the needs of persons over 14 years of age; and (b) must be given for not less than 144 hours per year.

The work already mentioned in two examples of plumber's part-time instruction might, if elementary enough, be given between 8 a. m. and 5 p. m. to a group of pupils employed as messengers, clerks, soda-fountain men, drivers, and in other occupations, excepting plumbing, the instruction being devised to prepare for entrance into the plumbing trade.

Such a class would be a part-time trade preparatory class. Its work would seldom, if ever, coincide with that of the trade extension class, and the success of such instruction, except as an entering wedge to be followed later by part-time trade extension work, is generally doubtful.

Instruction will be designed to meet the needs of persons who have entered upon employment and who have only a limited time for preparation for a specific trade. It will include shop practices of commercial quality and quantity and also related subjects as drawing, science, etc. Actual trade or industrial productive work will be emphasized and will be largely individual in character.

PART-TIME TRADE PREPARATORY TYPE COURSE.

FIRST YEAR.	SECOND YEAR.
English.	English.
Shop Mathematics.	Mathematics.
Accounting.	Physics
Drafting.	Mechanical Drawing.
Shop Work.	Co-operative shop work with manufacturing plants.

This may be extended to three or four years.

PART-TIME GENERAL CONTINUATION SCHOOLS OR CLASSES.

A general continuation part-time school or class established under the Federal Act is a public school or class established and maintained in any community for the purpose of giving instruction of less than college grade to persons over 14 who have entered upon employment, WHICH INSTRUCTION SHALL BE GIVEN IN SUBJECTS TO ENLARGE THE CIVIC OR VOCATIONAL INTELLIGENCE OF YOUNG WORKERS. The instruction in a general continuation part-time school or class must (a) be designed to meet the needs of persons over 14 and less than 18 years of age; (b) be given for not less than 144 hours per year.

The group of plumbers in our trade extension class, and the mixed group from various occupations in our example of trade preparatory work might, if they were all over 14 years of age, be grouped together in classes where instruction would be given in such subjects as English, Civics, History of industries, arithmetic, trade mathematics, or any commercial branch or elementary school subject. Such a class would be a general continuation part-time class if it met between 8 a. m. and 5 p. m. where these hours constitute the working day.

To similar classes might come young women from stores or factories to study home economics subjects, commercial subjects, industrial subjects not trade extension or preparatory, and general educational courses.

The course of study may include any subject given to enlarge the civic or vocational intelligence of the workers who have entered upon employment. In general, courses of study will include such grammar school subjects as reading, writing, spelling, history, and arithmetic, or such

high school subjects as English, elementary science, mathematics, economics, mechanical drawing, geography, civics, etc.

EVENING TRADE EXTENSION SCHOOLS OR CLASSES.

An evening industrial school or class established under the Federal Act is a public school or class established and maintained in any community for the purpose of giving instruction of less than college grade in a particular trade, supplemental to the day employment, to persons over 16 years of age who have entered upon employment in that trade or industrial pursuit.

For example, an evening industrial school for plumbers' helpers would be established to give these boys instruction in blue-print reading for plumbers; in State and local rules and regulations for plumbing installation; in costs and estimating; and in other allied subjects, all related to the plumbing trade. The instruction would be of less than college grade and given outside the hours of 8 a. m. to 5 p. m., if these hours constituted the regular working day for plumbers in that community.

As far as possible instruction will be from any short courses covering some one phase of an industrial pursuit, as for example:

Courses in Textiles divide themselves into about twenty units, three of which are suggested here.

No. 1,	Opening and Picking Process.....	10	Lessons
No. 2,	Carding	10	"
No. 3,	Combing	10	"

Machine Shop Practice courses divide themselves into about fourteen units, three of which are suggested here:

Unit 1	Shop Work on the Engine Lathe.....	20	Lessons
Unit 7	Machine Shop Drawing.....	50	"
Unit 11	Mechanics and Transmission Machinery	5	"

Auto Mechanics can be divided into twelve or fifteen units; general electric work, carpentry, plumbing, heating, and practically all branches of industry can be divided into unit courses as have been indicated above.

GENERAL STATEMENT OF METHODS.

The methods that should be used will be suggested by the term "Vocational Education." All of this work outlined in the foregoing courses is specific in nature and has a direct bearing upon the earning capacity of each individual in the class. Methods should be employed that are as near shop conditions as possible. The exercises that are worked out should be problems that will be met with in productive life. The theory that enters into each instructional course should be adapted to the experience of the learner. Allen's three tests of knowledge should be the infallible guide as a test for the efficiency in instruction, namely: first, the learner should thoroughly understand the operation; second, he should be able to do it in the quickest possible time; third, he should be able to do it with the least possible physical effort.

The instructor must ever keep in mind the three methods of learning, which are: trial and error, imitation, and free ideas or reasoning. Most shop instruction is derived from the first two methods. It is the third method, however, which is most effective and most lasting, therefore most diligently to be striven for.

TEACHER TRAINING.

The State Plan further provides for Teacher Training in Trades and Industries, which training has been localized at the Georgia School of Technology for white teachers and at the Georgia State Industrial College for colored teachers and shall be cared for through the departments of industrial education of these two institutions. The function of these departments is to train future teachers of trade, industrial, and related subjects, and to further the training of teachers now in service.

In making the outline of the courses above, due credit should be given to Bulletin 17, Trade and Industrial Education Series, and Georgia State Plan for Vocational Education. The courses outlined are intended as a matter of information, rather than as a matter of definite guidance. If in any community there exists a condition which seems suitable for the organization of any of these types of schools, the State Supervisor of Trades and Industrial Education should be notified and he will advise with the proper authority as to the feasibility of organizing such a class or school.

VOCATIONAL HOME ECONOMICS FOR HIGH SCHOOLS

MISS EPSIE CAMPBELL.

The Home Making Course for High Schools as outlined by the Vocational Board aims to offer such a course as will train a girl to become a more efficient home-maker. This vocation is a complex one and includes many tasks and duties. Some of these duties are, the selection and purchase of foods; the planning and preparation of meals; purchase, care and repair of clothes; the care of the sick; care and training of children; planning and furnishing the home; the management of the home; the planning for and spending the income; the establishment of right ideals of life. It is highly important that the young home-makers of the future have some training for these "undifferentiated jobs" during her years of general academic training.

TYPES.—There are three general types of Home-Making Classes:

(1) *All-Day Classes.* These are established in the day schools for girls over 14 years who can give half the school day to Home Economics or Home Economics and related subjects. In towns or communities under 25,000 population this must cover 150 minutes per day. In cities of over 25,000—180 minutes per day must be given—a part of which should the teacher's time permit, may be supervised home work in the natural practice laboratory. These projects must relate to the work of the year.

(2) *The Part-Time Classes* are for girls and women over 14 years who have entered employment as wage earners or home makers and can give at least 144 hours during the fiscal year to the study of home-making or home-making and subjects to increase civic intelligence.

(3) *The Evening Classes* are for girls and women out of school over 16 years of age who desire further training but for a briefer length of time than the part-time classes.

According to the Smith-Hughes Act of February, 1917, girls in High School who choose the Vocational Home Economics course and devote half the day to Vocational subjects or to Vocational and Related subjects may select from these groups:

A. VOCATIONAL SUBJECTS—

Home Nursing and Child Care.
Home Management, etc.
Textiles and Clothing.
Foods and Cookery.

B. RELATED SUBJECTS —

Chemistry.
Science.
Physics.
Hygiene.
Physiology.
Drawing and Design.
Industrial History.

The remaining half day may be given to subjects selected from this group:

C. NON-VOCATIONAL SUBJECTS.

English.
History.
Language.
Mathematics.
Music.
Civics—Physical Training, etc.

These suggestions are offered for planning a course of two years.

A WEEKLY PROGRAM OF VOCATIONAL HOME ECONOMICS.— 45 Minute Periods.— First Year.

150 Minutes Type:

Period	Monday	Tuesday	Wednesday	Thursday	Friday	
1.	Elementary Garment Making and Textiles	Food Study	Elementary Garment Making and Textiles	Food Study	Elementary Garment Making and Textiles	Alternate each half year
2.	Elementary Garment Making and Textiles	Food Study	Elementary Garment Making and Textiles	Food Study	Elementary Garment Making and Textiles	Alternate each half year
3.	English	English	English	English	English	
4.	General Science	First Term Physiology Second Term Hygiene and Sanitation	General Science	Physiology Hygiene and Sanitation	General Science	
5.	Study	Study	General Science	Study	General Science	
6.	History	History	History	History	History	
7.	Mathematics and Electives	Mathematics and Electives	Mathematics and Electives	Mathematics and Electives	Mathematics and Electives	
8.	Electives	Electives	Electives	Electives	Electives	

SECOND YEAR. — 180 Minutes Type. — In Towns of over 25,000.

Period	Monday	Tuesday	Wednesday	Thursday	Friday	
1.	Planning and Serving Meals. Dietetics.	Home Management and Household Decoration.	Planning and Serving Meals. Dietetics.	Home Management and Household Decoration.	Planning and Serving Meals. Dietetics.	
2.	Planning and Serving Meals. Dietetics.	Home Nursing and Child Care	Planning and Serving Meals. Dietetics.	Home Nursing and Child Care	Planning and Serving Meals Dietetics.	
3.	English	English	English	English	English	
4.	Textiles and Dress Making	House Planning and Furnishing	Textiles and Dress Making	House Planning and Furnishing	Textiles and Dress Making	Dress Making and Millinery last half year
5.	Textiles and Dress Making	Clothing and Design	Textiles and Dress Making	Clothing and Design	Textiles and Dress Making	
6.	History and Civics	History and Civics	History and Civics	History and Civics	History and Civics	
7 & 8	Elective	Elective	Elective	Elective	Elective	

NOTE: There may be many modifications or variations—for example, if physiology, hygiene and sanitation have been taught in the grades, General Science, Household Chemistry, and Physiology may be substituted. Many variations can be made in the Food and Clothing courses if these subjects have been taught in the grades. If Drawing and Design is not taught as a separate course it should be taught in connection with other subjects. Whenever the interest and conditions permit a more comprehensive course of three or four years may be introduced.

It is possible to reach the greater number of pupils in the eighth and ninth grades, and here it is also possible to help girls find themselves and develop interest of the right sort in home-making.

The following outlines are intended to be used in the All-Day, Part-time or Evening Classes. They may be planned so as to be used (1) in their entirety; (2) certain units or parts of units may be selected as circumstances require; (3) or a modification of these courses may be arranged giving a survey of all phases of the work and this may be used in day schools not having the Smith-Hughes plan.

I. CLOTHING:

1. Elementary sewing, hand and machine processes on (a) garments for children (b) underwear (c) blouses, dresses, etc.
2. Choice of materials for clothing—home made or ready-to-wear.
3. Study of textiles, the kinds, prices, widths, uses, substitutes, and adulterations,—suitability of clothing to wearer, to occasion, and to income.
4. Care and laundering of various textile materials.
5. Hygiene of clothing.
6. Care, repair, remodeling and renovation of clothing, hats, shoes, etc.
7. Clothing design in relation to color, line, style and appropriateness for use.
8. Construction and use of patterns.
9. The principles underlying the making of different types of garments.
10. Dressmaking and designing.
11. Millinery.
12. Suitable accessories as corsets, shoes, hose, hats, gloves, collars and cuffs—influence of clothing on character of the individuals.

II. FOODS:

1. Elementary food study and preparation of dishes from fruits, vegetables, meats and substitutes, beverages, breads, etc.
2. Choice of food in reference to the needs of the body considering nutritive value, cost, etc.
3. Marketing, selection and care of foods.
4. Menu preparing emphasizing the needs of different individuals, and, also, considering combinations in reference to taste, color, texture, shape, etc.
5. Preparation and serving of different meals.
6. Preservation and conservation of foods by various methods.
7. Elementary dietetics.
8. Elementary food chemistry.
9. Food selection and preparation for (a) infants, (b) children, (c) invalids.
10. School lunches.

III. HOME PLANNING AND FURNISHING.

1. Aims and ideals in Home Building.
2. Selection of a home.
3. Relation of house to site—landscape gardening.
4. Planning the house—interior and exterior.
5. Heating, lighting, ventilation.
6. Decoration and furnishing of the home.
7. Art as applied to furniture, furnishing, etc., in reference to line balance, rhythm, and harmony.
8. Color in the home.
9. Furnishings for different rooms.
10. Selection of—
    - (a) Furniture.
    - (b) Rugs.
    - (c) Draperies.
    - (d) Linens and all textiles used in the home.
    - (e) Pictures, ornaments, bric-a-brac.
    - (f) Wall covering, etc.

IV. HOME MANAGEMENT:

1. Budgeting—
    - (a) Study of wise spending of income.
        - (1) Rent.
        - (2) Food.
        - (3) Operating expenses.
        - (4) Higher life.
    - (b) Personal budgeting.
2. House Wifery.
    - (a) Marketing.
    - (b) System in household work, in meal preparation, and in service for the family.
    - (c) Care and cleaning of floors, walls, windows, closets, silver, metals, etc.
    - (d) Care of linen, beds, and bed-making.
    - (e) Care of furniture.
    - (f) Daily and general care of home.
    - (g) Household pests.
    - (h) Laundering.
    - (i) Labor saving kitchen and tools.

V. HYGIENE AND SANITATION.

1. Personal Hygiene.
    - (a) Food.
    - (b) Clothing.
    - (c) Rest.
    - (d) Exercise.
    - (e) Care of the body.
2. Household Sanitation.
    - (a) Water supply.
    - (b) Sewerage disposal.
    - (c) Plumbing.
    - (d) Sanitary living in reference to house-cleaning and surroundings.
3. Community Health and Sanitation.
    - (a) Laws regarding carrying out of sanitary measures.
    - (b) Quarantines.
    - (c) Water supply.

(d) Vital statistics.
(e) Sanitary school buildings.
(f) Clean playgrounds.
(g) Medical inspector for schools.
(h) Educated public in reference to preventable diseases.

VI. HOME NURSING AND CHILD CARE.

1. Home Nursing.
   (a) First aid helps and uses of simple devices.
   (b) Location, care and equipment of sick room.
   (c) Responsibility of the home nurse as to appearance, manner, clothing and self protection.
   (d) General care of the patient:
      (1) Observations of symptoms, records, etc.
      (2) Communicable diseases.
      (3) Convalescent patients.
2. Child Care.
   (a) General care and health of the baby.
   (b) Clothing for the baby.
   (c) Food for the baby.
   (d) Child study:
      (1) In early years.
      (2) Adolescence.

The following bibliography is not intended to be an exhaustive one but these books are suitable for the use of high school students and a representative number should be found in every High School doing Vocational Home Economics work.

The books marked with a star may be used as texts with supplementary lessons from other sources.

CLOTHING.

"Clothing for Women."—Baldt.—Lippincott & Co.---------$2.00
*"Textiles."—McGowan & Waite.—McMillan & Co---------1.10
"Principles of Correct Dress." by Winterburn.—Harper---------1.00
*"Household Arts for Home and School," by Cooley & Spohr.—Vol. I.—McMillan ---------1.00
"Clothing for the Family."—Bulletin 23.—Federal Board for Vocational Education.—Supt of Documents.—Washington, D. C.-----.20
"Costume Design & House Planning."—Izor.—Atkinson & Mentzer Co. ---------.90

FOODS.

"Food Study."—Wellman.—Little Browne & Co.---------$1.10
"Table Service."—Allen.—Little Browne & Co.---------1.25
"Uses and Preparation of Food."—Federal Board for Vocational Education.—Bulletin No. 35.—Supt of Documents, Washington, D. C. ---------.20
*"Domestic Science—Principles and Application."—Bailey.—Webb Publishing Co. ---------1.10
"Dietetics for High Schools."—Willard & Gillette.—McMillan & Co.---1.10

HOME PLANNING AND FURNISHING.

"Domestic Architecture."—L. E. Robinson.—McMillan Co.---------$1.50
"Honest House."—Goodnow.—The Century Co., N. Y.---------3.00

*"Interior Decoration."—Amy Rolfe.—McMillan Co. 1.25
*"A Course in Home Planning and Furnishing."—Calkins.—Scott-Foremans & Co., Chicago. .60
"Planning and Furnishing the Home."—Quinn.—Harper's 1.00
"Furnishing the Home of Good Taste."—by Throop-McBride.—Nast & Co.—N. Y. 2.00
Magazines: "House and Garden," " House Beautiful."

HOME MANAGEMENT.

"New Housekeeping."—Frederick.—Doubleday-Page & Co., Garden City, N. Y. $1.00
"Housewifery."—Balderson.—Lippincott & Co., Philadelphia. 2.00
"Business of the Household."—Faber.—Lippincott & Co., Philadelphia 2.00
"The Efficient Kitchen."—Child.—McBride-Nast && Co., N. Y. 1.25
"Marketing & Household Work Manual."—Donham.—Little-Browne 1.50
"Laundering."—Balderson.—L. R. Balderson.—Philadelphia 1.25
*"Personal Hygiene & Home Nursing."—Lippitt .60
"Bacteria—Yeast—Mold."—Conn.—Ginn & Co.—Boston 1.00
*"Elements of Hygiene and Sanitation."—Hough & Sedgwick.—Ginn & Co.—Boston 1.50
"Healthful Living."—Williams
"Personal Hygiene."—Pyle.—W. B. Saunders.—Philadelphia 1.75

HOME NURSING AND CHILD CARE.

*"Home Nurses Handbook."—Aikens.—W. B. Saunders Co. (Revised) $1.50
"Feeding the Family."—Rose.—McMillan Co. 1.10
Department of Labor.—Children's Bureau Bulletins.—Washington, D. C.
"Home Nursing."—Harrison.—McMillan Co. .75
"Elementary Hygiene & Home Care of the Sick."—Delons & McIsaac.—American Red Cross
"Prevention of Disease & Care of the Sick."—Stimpson.—Free.—U. S. Public Health Service.—Washington, D. C.

GENERAL HOME ECONOMICS FOR THE HIGH SCHOOL

(Not Vocational.)

MRS. BESSIE STANLEY WOOD.

For the High School giving training in Home Economics subjects for purposes of general education, and as a basis for College courses later on, the work should be a modification of the foregoing plan for Vocational Home Economics. The subject matter for students of High School age is the same, the only difference being in the intensiveness of the program of work.

In the four year High School, the courses in Home Economics will be distributed throughout the whole High School period, and while the subjects of cooking and sewing can be placed in alternating years, it is best that the girl have some of each, together with some related subjects each year.

There should be for each student at least two 80 or 90 minute periods a week in Home Economics, with an additional hour of school lunch work, or practice in some of the housekeeping duties necessary in the management of the department.

The course should embrace the following:

Elementary Cookery.
Home Table-service.
Elementary garment making.
Selection and care of clothing.
Elementary Science.
Home Management (This to relate especially to the furnishing and caring for the girls'own room, and to interest her in helping with the problems of her home).

The time of the student should be divided among the Home Economics subjects so as to give good ideas of both food and clothing and should include such aspects of these subjects as can function immediately in the life of the child.

Cook such things as will be immediately useful. Put cookery on the basis of the simplest combination of food materials to make an adequate dietary. Young students need practice for visualizing. Menu-making is a good starting point—food as they know it, toward food as it ought to be.

The food question is the big question in Home Economics. It is a

greater financial problem than clothing and shelter. What goes inside the body is more important than what is put on the outside. Keeping accounts, the cost of labor—service—all come in, but these are preceded by cookery.

Elementary cookery belongs in the High School, and a person in College should not try to put higher things on a foundation lacking in this respect, but there should be a well defined line where High School work stops and College work begins.

Don't try to put all you know into an elementary course. Don't make the course too scientific. Don't make formal application to calories nor to food classification till you have put it on the economic basis of home-making. The further you go along the farther you get from home-making. Seventh and eighth grade girls are the ones that think most about home-making. When we formalize we may make it not worth while.

Teach food preparation for health and efficiency—the best kind of nutrition.

Teach personal cleanliness in relation to food.

The food problem will largely determine the economic future of America. Make cooking teach citizenship. What shall boys and girls know about food before they come to vote? The most desirable trait of citizenship is to do one's duty unflinchingly when called upon. "Esprit de Corps" is necessary. We want to develop the right community spirit. Education must do it.

Education in foods, means right legislation on foods.

A better adjustment of school to life is what we need—a change in standards. Education is seeking to ally itself with the home—bringing together the child, the parent, the teacher, the expert in health—preparing for civic and economic duties and for domestic responsibilities.

We must feel it a dignified thing to study Home Economics for the purpose of home-making. "My own right hand my cup bearer shall be."

THE HISTORY AND PRINCIPLES OF EDUCATION

T. J. WOOFTER, PH.D.

I. INTRODUCTION.

(I) The history of education is a part of the history of the world into which it is woven throughout. To follow it to advantage from earliest times to the present, a student should first become acquainted with general world history. As a study for the sake of culture, the history of education is one of the richest fields of history.

Many of the readers of this Manual may not have had courses in general history. These readers should study mainly the modern period. For all teachers a study of the modern period is of most importance.

This is but an outline syllabus, and it should have a text of the history of education to go along with it. There are several elementary texts, some of which are the following:

The History of Education, Duggan. D. Appleton & Co.

A Student's History of Education, Graves. Macmillan Co.

A History of Modern Elementary Education, Parker. Ginn & Co.

A very full and more advanced text, and a most excellent one is, The History of Education, Cubberley. Houghton Mifflin Co., 1920.

(II) *Some Values to be Derived* from a study of the history of education.

1. Broader vision.
2. Better understanding of present theories and practices.
3. Contrast with the past may stimulate originality and invention towards better modern schools.
4. Removal of complacency which holds that education, schools, equipment, methods, etc., are good enough as they are, or that the old time practices are the right models.
5. Realization that conditions are continually changing and that education must change to prepare for a changed order.

Add others to this list, especially after having studied the text.

II. PRIMITIVE AND ORIENTAL.

(I) Primitive people lived in small groups such as tribes, clans, and the like. These had no books, but they had education both practical and theoretical.

The practical was limited to the necessities of living, and was learned through imitation in helping the older people.

The theoretical was to impart the secrets, the beliefs, etc., of the tribe, and was given through imitations.

(II) The Oriental peoples include such as the ancient nations of China, Egypt, India, Israel, Persia, Assyria and Babylonia.

In Egypt and India the people were in *castes.* How did that affect education with them?

In China there was worship of ancestors, and nearly all learning of value was thought to be in the ethico-religious writings of Confucius. How must this influence the kind of education they would give?

(III) Some characteristics of Oriental education: Based on tradition and authority; memory methods; servile imitation; the best for a few people only; non progressive.

A modern view is that education should adapt to needs.

Did primitive and oriental attempt this?

Can you cite anything in our education that does not serve to adapt to our needs?

How did it get into our education? Why keep it?

In what respect were the Jews superior Orientals?

III. Greece and Rome.

(I) *Spartan Greek.* Only about one tenth of the group were real Spartans. These had conquered the other nine tenths, holding them in unwilling subjection.

Spartan education was physical, military, moral, not literary. *Why should it have been so? What prompted a law compelling them to eat at public tables? Did they realize their ideals? Were their aims high ones? What in them would you compliment?*

(II) *Athenian Greek.* We are highly indebted to the Greeks for models in art, literature, philosophy, a scientific spirit of inquiry, and for other influences in modern civilization. But our indebtedness here is to the Athenians who produced the wonderful culture and the great intellectuals of the ancient wold.

At first the individual was educated wholly for service to the state. Later there was great stress for individual freedom and personality. The problem of a proper balance of these two, freedom of the individual and the good of the social group, arose with these Athenians and has not yet been solved fully.

Early Schools: The *palaestra,* for physical education, and the *didascaleum* for music and literature, were elementary schools, both attended daily under escort of a faithful old slave, the pedagogus. The *gymnasium* was a high school for physical, moral, and general education. Two years of military education followed.

What was studied in these schools?

On what was greatest emphasis placed?

They accomplished wonderful results.

Later Athens became a great commercial metropolis, and new types of schools developed for the new order.

Later Schools: The schools of the Sophists to prepare for new citizenship; *The Academy* of Plato to teach philosophy; The Lyceum of Aristotle to teach philosophy, science, and rhetoric; The University of Athens, a combination of these schools.

Great men to be studied are Socrates, Plato, an Aristotle.

What new was the contribution of Socrates?

What the nature and steps of Socratic method?

Plato's Republic was the first book with a treatise on education. What did it recommend?

Aristotle has been styled "the greatest mind of all antiquity." What did he accomplish to merit this distinction?

Greek civilization named, and its culture passed over into the Roman.

(III) *Roman Education.* Much of Roman culture and education was borrowed from the Greeks, and we get no very original suggestions from them. The Romans were exceedingly practical and their contribution has been in law and political organizations. Oratory was stressed in their education. They produced some literary classics yet studied. Great names are Homer, Cæsar, Cicero, Quintilian, Seneca, Pliny, Plutarch.

Give a summary of points to be commended in Grecian education?

Wherein were their education and their civilization weak?

What was the great contribution of the Romans to the world?

IV. THE MIDDLE AGES.

(I) Roman civilization became decadent.

Great swarms of Huns and other barbarians from northern Europe captured Rome and overran western Europe.

Christianity came in as a new factor. The barbarians became ready converts Christianity gradually grew to dominate the thought and life of Europe.

There was a period of great disorder following the downfall of the Roman civilization. Christianity organized about monasteries as centers. The secular society of Europe organized about great castles of the Feudal System and Chivalry.

(II) Schools at first were in the monasteries, but their program was meager. Reading, writing, and very little arithmetic and astronomy were taught along with church music and the catechism. Later, the Seven Liberal Arts made up the curriculum, but these were most barren. Only a few monasteries were liberal.

(III) The barbarians were not ready for much learning. The church put ancient learning under ban since it was so completely interwoven with pagan philosophy, and there was little else to study. This was the period know as the Dark Ages.

Review in history concerning the following, especially what each contributed to the bringing of learning back and a revival of intellectual activity:

The Monasteries.
Charlemagne.
Chivalry.
The Crusades.
Rise of Universities.
Great Inventions (Mariner's Compass, printing, and gunpowder).
Discovery of America.
Return of Commerce.

V. The Revival of Learning.

(I) By the latter part of the fifteenth century, A. D., so many people had become intellectually active under the stimulus of the foregoing factors, that there arose a rebellion against authority and dogmas which had held human reason in slavery. Old classic manuscripts of Greek and Latin literature were hunted up and widely read. People became fascinated by these classics, and these became the chief studies in the schools and universities. There was a revival of reason in secular affairs and in religion. This has been called, The Renaissance, or, The Revival of Learning, and we are still living under its influence.

(II) This revival gave the schools something new to teach. The church services and writings had been mostly in Latin. The learning thus revived was in Latin and Greek, and in this way the study of Latin and of Greek began to be considered the *summum bonum* in education.

(III) This revival of reason and individuality took a theological turn in northern Europe, resulting in the Protestant Reformation led by Martin Luther. Luther held that every man is responsible directly to God, that the Bible is his sole rule and guide, hence he must read the scriptures for himself. This denied the right of priests and pope to dictate beliefs, and thus came a new revolution in the church.

(IV) Note some profound influences upon education which reach down to the present day.

1. Latin and Greek fastened on the schools. Since scholarly learning was in these languages, they were made the chief instruments of education.

John Sturm of Strasburg (1538-1582) organized his school in ten grades. Latin and the catechism were taught in the first five grades, Latin, Greek, and portions of the scriptures in the upper five grades. This was the first graded school, and such was what it considered the content of education.

Sturm's model was widely imitated. Celebrated English schools, Eton, Rugby, etc., were after this model. Its type appeared in America in what were called in New England and New York, "Latin Grammar Schools."

The universities also became in most part Latin and Greek institutions.

There are many men today still clinging to this ideal believing that it takes Latin and Greek to make the truly educated person.

2. A second great influence comes from the doctrine of Luther. If each one must interpret his Bible, he must learn to read. This leads to the idea of universal and compulsory education. Luther held that to accomplish this the State should assist religion by control of education, since the church lacked power to compel and make universal. Thus state control, compulsory and universal education are children of the Protestant Reformation. Wherever great Protestant leaders commanded wide influence in those days, we find now that through compulsory education ignorance and illiteracy have been banished.

VI. THE MODERN PERIOD.

(I) The *Seventeenth Century* and the *Revival* of the *Scientific Spirit.*

1. The spirit of the Renaissance had been literary. The revival of natural science and scientific method began with Francis Bacon (1561-1626).

Bacon ridiculed the methods of the Greek and Latin classicists. He claimed that the chief aim of all learning should be to benefit the condition of man. He advocated scientific knowledge and revived inductive method for the study of nature first-hand rather than the study of ancient books.

This gave a new purpose and a new method to education and led to new subject matter, the natural sciences.

2. The man who tried to introduce in the schools the doctrines of Bacon has been styled the first great reformer of modern education. This was John Amos Comenius of Moravia (1592-1675).

He was a teacher who would combine religion, classic literature, and natural science, and would "teach all things to all men."

Since the real objects of nature could not be brought into the school rooms, he said that the next best thing was to have pictures of them. Accordingly he wrote a text-book called "The Orbis Pictus" (The World Illustrated), which was the first school book containing pictures.

3. His reforms were not readily accepted. Traditional education is very stubborn. However, schools appeared in Europe, especially in Germany, known as Real Schools.

In America there sprang up in opposition to the Latin and Grammar Schools, the schools known as Academies. There were many of these in Georgia. The original aim was to prepare in a practical way for life.

4. Find out about some of these academies, what they taught, and whether they were true to the original aim or were influenced by tradition to depart from this aim.

5. By this time new languages with their literatures (English, French, Spanish, etc.) had developed in Europe, and Latin and Greek

did not have a monopoly. Church services were rapidly passing from Latin. The new educational doctrine stressed other things. To maintain their hold, a new doctrine was formulated. This was that the study of Greek and Latin disciplined the mind, and that mental discipline was the chief object of education. This has been called the theory of "Formal Discipline." It let in mathematics as a good study for discipline. It was opposed to the merely practical education, ridiculing such as "bread and butter education." This has held on as one of the most stubborn of traditional doctrines.

(II) Eighteenth Century Education.

1. The revival now broadens to involve the social in addition to the scientific and the classical.

Traditional government and social order are attacked. It is an age of revolutions, in England, in France, and in our own colonies, the Revolution of 1776 for social rights and the principle of government by the people.

2. A leading revolutionary spirit was Jean Jaques Rousseau, 1712-1778, who inspired the bloody French Revolution and also many of the thoughts of Thomas Jefferson, such as that "all men are created equal."

His most valuable contribution to educational thought led to child study as fundamental. He claimed that children must be understood and treated as children, and that education must follow the order of nature in the development of the child.

"Punishment must never be inflicted on children as a punishment; it ought always to come to them as the natural consequences of their bad acts."

This last thought has been worked out by Herbert Spencer into the theory of natural punishments, now quite popular.

Rousseau's great cry was "Back to nature."

3. Cite instances where child study has influenced school work.

Suggest some natural punishments. Discuss the value of such and the limitations of the theory.

4. John Locke of England is another thinker to be studied.

(III) Nineteenth Century Education.

1. The suggestions of reform and the lines of development are now many and complex. This is a most fruitful century. The first great tendency was toward "psychologizing education." This grew out of Rousseau's proclamation that education was essentially a matter for the development of powers implanted by nature in the individual. The leading men in this movement were Pestalozzi, Herbart, and Froebel.

2. *Pestalozzi* (1746-1827), Born at Geneva, Switzerland.

(1) His first attempt was to organize, on a farm he owned, an industrial and agricultural school especially for the children of the poor. Children were to work on the farm and at trades part of the day, and

at ordinary studies part of the day, both activities considered essentially educative.

He failed in this enterprise, largely due to lack of business sense. In a period of poverty following this failure he wrote many things, notably two books, "Leonard and Gertrude," and "How Gertrude Teaches Her Children."

(2) His next venture was to take charge, on the invitation of the government, of a number of children made orphans by war. An old castle at Stanz was turned over to him for this. Here he housed, fed, cared for, and taught 80 children with no help excepting one servant. He earned here the title, "Father Pestalozzi."

He had no books, so he had to work out a system of instruction entirely unique. He devised lessons in oral instruction, and taught thus the geography, arithmetic, language, morals, history, etc. In less than a year soldiers returned and drove him out, thus ending these experiments, but he had hit upon far-reaching reforms leading to object lessons, oral language and number, history stories, and much that we call modern. He stimulated primary education by these new methods. And, not to be forgotten, he stressed love as the all-transforming power. Discipline had been harsh, but Pestalozzi started a reform.

He was a social reformer also, stressing the care of the weak and unfortunate, and we now have schools for orphans, for the wayward, for the deaf and blind, hospitals for the insane, etc. These are Pestalozzian.

(3) Later at Yverdun he founded and taught in a school to exemplify for the world his methods. This was the beginning for modern normal schools, also Pestalozzian.

3. *Herbart* (1776-1841).

(1) Herbart was Professor of Philosophy in the German University of Konigsburg. This was at the time the most noted chair of philosophy in the world.

He established courses in the philosophical study of education and also a school for practice therein.

To him we are largely indebted for headway in putting education on a scientific basis. His doctrine needs to be carefully studied, and lack of space forbids an attempt to present this here excepting a few rather bare mentions, as follows:

(2) (a) Sense perceptions furnish the mind.

(b) New sense presentations are acted upon by former kindred experiences thus giving meaning to the new. This is called *Apperception.*

(c) The mind assimilates what it apperceives. The new must be related, or coupled up to the older experiences, or the mind does not assimilate.

(d) If apperception takes place, interest is aroused. Interest is many-sided, according to relations set up.

(e) The proper relating of the new to the old gives the idea of correlation of studies, history with geography, etc.

(f) Instruction should be essentially educative along the above lines. To make it so, every lesson should be carefully planned, considering five formal steps of the recitation.

a. Peparation for what is to be presented.
b. Presentation of the new.
c. Comparison of several cases to get the principle.
d. Generalization, the drawing up of the rule or definition of thing taught by proper principal.
e. Application, to test and complete.

(3) Topics for study and illustration:

The circle of learning.
Apperception.
Correlation.
Many-sided interest.
Instruction made educative.
Steps of the recitation.
Lesson plans.
The Culture Epoch Theory.
Moral education the center.

4. *Froebel* (1789-1852). *Some Froebelian Principles.*

(1) Education must begin with the spontaneous activities of the child. (Gave the Kindergarten.)

(2) The basis of education is the law of unity of all things. (Find unities).

(3) The process of education is development. Education is the conscious evolution of the race.

(Find out what this comprehends.)

(4) The method of the process is self-activity. Instruction should be based upon the interests and natural activities of the child, and every lesson should call forth proper activity.

(5) The school should be an epitome of society, a kind of home-democracy.

5. *Herbert Spencer* (1820-1903).

Before ending a study of nineteenth century educators, Spencer should be included, and if possible, his book, "Education, Physical, Intellectual, and Moral," should be read. It is readable and may be purchased cheap.

(1) Somewhat after Locke he stresses physical education as the first necessity. "The first duty to the child is to make it a strong, healthy animal."

(2) But he first raises the question, "What knowledge is of most worth?" He formulates the definition, education is preparation for complete living. He then examines subjects to see which contribute

most to health, happiness, success, and complete living. He concludes that the natural and social sciences, including a study of education itself, are of first importance.

(3) He exemplified Pestalozzianism and worked out a theory of punishment by natural consequences as a factor for normal education.

Spencer's influence has been felt in the recognition of a new type of culture, in a new standard of educational values, and a new impetus given to the scientific tendency in education which had gained headway since its beginning with Bacon and Comenius.

Contrast the new type of culture with the traditional type.
Read in history an account of the Industrial Revolution.
What natural sciences are now taught in elementary schools?
In high schools?

(IV.) SOCIALIZING EDUCATION.

A sociological view of education has been gradually developing. This view has to do with education as preparation for good citizenship, for social efficiency in the group, and for the welfare and progress of the social group.

Education thus becomes the agency which directs social evolution toward higher and better things. The state as a group needs education for its own life and progress. There are many phases of social education.

1. On political and economic grounds there must be state controlled systems of schools which in turn must be state supported. New England states developed these in the eighteenth century, but the Southern States did not do so until after the Civil War. The Western States are wonderfully progressive in this development.

Preparation for citizenship in the state is an aim of education from the political point of view.

(2) On vocational grounds,education should relate to life's needs. There must be learning to earn. A good citizen becomes economically independent. Natural social interests and activities may be used to hold children longer in school. Vocational education is now rapidly coming. Economic preparation is a social aim.

(3) On humanitarian grounds, there must be schools for defectives, for the criminally inclined, for the sparsely settled regions as well as the thickly settled, for "all the children of all the people" so that every child has his fair opportunity with no favoritism for any classes or sections. This is democracy's greatest undertaking.

A just opportunity for all is another aim.

(4) Moral and religious education is recognized as fundamental. The ancient Greeks, the modern Herbartians, and many others have stressed moral education as all important. Religion should be the greatest concern of every person. Religion has been the cement binding together the elements of all great civilizations, for, with the decay of religion came the downfall of the civilization. Certainly then religion

should be the greatest concern of every state. Whilst the last half century has brought some progress along these lines, we have yet to devise the best ways to encompass moral and religious education, the church and the state co-operating.

Religious-moral character is the highest aim.

VII. Present Tendencies.

1. Further expansion of the course of study. School studies and activities are being more nearly related to life's needs. Rural schools are farthest behind in this.

2. Better correlation of subjects; more scientific measurements.

3. Better articulation of types of schools. In a few states there is a tendency to multiply types, which is a violation of the general tendency.

4. The recognition of teaching as a profession, setting professional standards and awarding adequate professional compensation. In this, Georgia is far in the rear.

5. Vocational schools of all types are gaining ground.

6. There is more by way of discussion of the value and place of moral and religious education. Something better may come of it.

7. More is conceded for the school plant and its equipment. Teachers cannot "make bricks without straw."

8. Schools are consolidating, departmental work is gaining, and supervision is accomplishing more.

9. A fundamental reorganization of school systems is considered with high favor. In a haphazard way the system has grown in most states to consist of eight elementary grades, four high school years, four college years, and three or four more years for a profession. In the South we have only seven elementary grades.

Based upon natural periods of the development of child and youth, and upon other strong grounds, the reorganization would give for the South six years to the elementary school, three years to a junior high school, and two years to a senior high school. It is further recommended that in central and well supported high schools, two more, or junior college, years may be added to the senior high school.

10. The national government of the U. S. is moving towards extending financial assistance to the states for elementary and high schools. This is to stimulate the more backward states and to aid in equalizing opportunity in all the states of a nation so large and so diverse in resources.

11. The World War exposed many of our weaknesses. Our people were found short in literacy and in physical fitness, and, I fear, in patriotism and a real conception of democracy. We have come to face the reality that education is the soul of a nation and that democracy is not yet ideally safe. Too slowly are we coming into a full consciousness of the value of education.

SUPPLEMENT.

Elementary Course for Teachers.

1. Elementary Psychology and Child Study.
   Human Behavior, Colvin & Bagby. Macmillan Co. or
   Psychology for Teachers, La Rue. American Book Co.
2. History of Education.
   See Introduction, this chapter, for list.
3. Methods in Teaching, Managing, and Organizing.
   Teaching in Rural Schools, Woofter. Houghton Mifflin Co.
   Fundamental Principles of Learning and Study, Edwards. Warwick & York.

SPECIAL DAYS

The General Assembly, in the Code of School Laws passed in 1919, has required the observance by the schools of the following Special Days and in accordance with this action these suggestive programs have been prepared for the use of the superintendents and teachers:

THANKSGIVING DAY.

Last Thursday in November.

SUGGESTIVE PROGRAM.

If there is sufficient time to devote to this purpose, a most interesting occasion can be provided by arranging a short play with the children in character dress. Some of the outstanding incidents in the early history of the Pilgrim Fathers could be effectively presented. Longfellow's poem Courtship of Miles Standish lends itself beautifully to this purpose. Instead of this, however, the following exercises may be arranged:

1. Prayer by the Principal or Minister.
2. Song by School.
3. Reading: History of Thanksgiving.
4. Recitation: The Landing of the Pilgrims.

THE LANDING OF THE PILGRIMS.

The breaking waves dashed high
On a stern and rock-bound coast,
And the woods against a stormy sky
Their giant branches tossed;

And the heavy night hung dark,
The hills and waters o'er,
When a band of exiles moored their bark
On the wild New England shore.

Not as the conqueror comes,
They, the true-hearted, came;
Not with the roll of the stirring drums,
And the trumpet that sings of fame.

What sought they thus afar?
Bright jewels of the mine?
The wealth of seas, the spoils of war?—
They sought a faith's pure shrine!

Aye, call it holy ground,
The soil where first they trod.
They have left unstained what there they found—
Freedom to worship God.

—*Mrs. Felicia Hemans.*

5. Address by President of Board on topic "Why we should be Thankful."

UNCLE REMUS DAY.

December 9.

SUGGESTIVE PROGRAM.

1. Song: GEORGIA. Prof. Joseph Derry.

Blest be thy land, fair Georgia,
From the mountains to the sea,
The purpose of whose founders was
The Opprest from wrongs to free.

Chorus.

Then hail to thee, our Georgia,
For of the "Old Thirteen,"
No brighter star shone ever,
Or ever shall be seen.

Not for themselves, but others,
Was the way their motto ran,
And in the path of mercy
Did they early lead the van.

Our fathers sought the new world,
With a motive grand and high,
And faith in God hath ever
Led our hopes unto the sky.

And so on strong foundations
We see stately columns rise,
As symbols of those virtues
That our Georgia people prize.

A soldier guards the portals,
While a sunburst from above
Illumines arch and pillars
With God's all protecting love.

God grant our solons Wisdom,
  Let strict justice hold the scale,
And Moderation guide the hand
  That must make the law prevail.

To both her mottoes faithful,
  Will our Georgia ever stand,
While to our whole great Union
  She pledges heart and hand.

JOSEPH TYRONE DERRY.

2. Reading: Life of Joel Chandler Harris.

JOEL CHANDLER HARRIS.

Joel Chandler Harris was born in Eatonton, Georgia, December 9, 1848, and died at the "Sign of the Wren's Nest," his home in West End, a suburb of Atlanta, Georgia, July 3, 1908. He spent several years at Eatonton Academy, but left school at the age of twelve to go to the farm of Mr. Joseph Turner, nine miles from Eatonton, to learn the printer's trade. Most of his training for his future work was gained from the books in Mr. Turner's library, and from the negroes on the plantation who filled his mind with folk-lore. After the war he worked on various newspapers, finally becoming editor of the Forsyth Advertiser. Later he was offered a place on the staff of the Savannah Daily News, where he remained from 1871 to 1876. In the latter year a yellow fever epedemic drove him to Atlanta, where he became a member of the editorial staff of the Atlanta Constitution. His literary career began with his accession to this position on the Constitution, and continued for over thirty years. He retired from the Atlanta Constitution in 1900 to devote himself to more permanent literary work. His chief writings are Uncle Remus, His Songs and His Sayings; Nights with Uncle Remus; On the Plantation; Little Mr. Thimblethinger; Free Joe, and Other Georgia Sketches; Uncle Remus and His Friends; Chronicles of Aunt Minervy Ann; Aaron in the Wild Woods; A Little Union Scout: Gabriel Tolliver; Tar-Baby and Other Rhymes.

The Uncle Remus Memorial Association, Mrs. A. McD. Wilson, Atlanta, President, is an organization formed for the purpose of preserving The Wren's Nest as a monument to the writer. Visitors are always welcomed. Address communications to the President.

3. Address: Harris, the Author, by the Principal or Visitor.

4. Reading: The Wonderful Tar-Baby Story.

THE WONDERFUL TAR-BABY STORY.

"Didn't the fox never catch the rabbit, Uncle Remus?" asked the little boy the next evening.

"He come mighty nigh it, honey, sure's you born — Brer Fox did. One day atter Brer Rabbit fool 'im wid dat calamus root, Brer Fox went to wuk en got 'im some tar, en mix it wid turkentine, en fix up a contrashun wat he call a Tar-Baby, en he tuck dish yer Tar-Baby en he sot 'er in de big road, en den he lay off in de bushes fer to see wat de news wuz gwineter be. En he didn't hatter wait long, nudder, kaze bimeby here come Brer Rabbit pacin' down de road—lippity-clippity, clippity-lippity—dez as sassy ez a jay-bird. Brer Fox, he lay low, Brer Rabbit come prancin' 'long twel he spy de Tar-Baby, en den he fotch up on his behine legs like he wuz 'stonished. De Tar-Baby, she sot dar, en Brer Fox, he lay low.

"'Mawnin'!' sez Brer Rabbit, sezee, 'nice wedder dis mawnin',' sezee.

"Tar-Baby ain't sayin' nothin', en Brer Fox, he lay low.

"'How duz yo' sym-tums seem to segashuate?' sez Brer Rabbit, sezee.

"Brer Fox, he wink his eye slow, en lay low, en de Tar-Baby, she ain't sayin' nothin'.

"'How do you com on, den? Is you deaf?' sez Brer Rabbit, sezee. 'Kaze if you is, I kin holler louder,' sezee.

"Tar-Baby stay still, en Brer Fox, he lay low.

"'Youer stuck up, dat's w'at you is,' says Brer Rabbit, sezee, 'en I'm gwine ter kyore you, dat's w'at I'm a gwine open,' sezee.

"Brer Fox he sorter chuckle in his stummuck, he did, but Tar-Baby ain't sayin' nothin'.

"'I'm gwine ter larn you how ter talk ter 'specttubble fokes ef hit's de las' ack,' sez Brer Rabbit, sezee. 'Ef you don't take off dat hat en tell me howdy, I'm gwine ter bus' you wide open,' sezee.

"Tar-Baby stay still, en Brer Fox, he lay low.

"Brer Rabbit keep on axin' 'im, en de Tar-Baby, she keep on sayin' nothin', twel present'y Brer Rabbit draw back wid his fis', he did, en blip, he tuck 'er side er de head. Right dar's whar he broke his mer-lasses jug. His fis' stuck, en he can't pull loose. De tar hilt 'im. But Tar-Baby, she stay still, en Brer Fox, he lay low.

"'Ef you don't lemme loose, I'll knock you gain,' sez Brer Rabbit, sezee, en wid dat he fotch 'er a wipe wid de udder han', en dat stuck. Tar-Baby, she ain't sayin' nothin', en Brer Fox, he lay low.

"'Tu'n me loose, fo' I kick de natal stuffin' outen you,' sez Brer Rabbit, sezee, but de Tar-Baby, she ain't sayin' nothin'. She des hilt on, en den Brer Rabbit lose de use of his feet in de same way. Brer Fox, he lay low. Den Brer Rabbit squall out dat ef de Tar-Baby don't turn 'im loose he butt 'er cranksided. En den he butted, en den his head got stuck. Den Brer Fox, he sa'ntered fort', lookin' des ez innercent ez one er yo' mammy's mockin'-birds.

"'Howdy, Brer Rabbit,' sez Brer Fox, sezee. 'You look sorter stuck up dis mawnin', sezee, en den he rolled on de groun', en laughed twel he couldn't laugh no mo.' 'I speck you'll take dinner wid me dis time, Brer Rabbit. I done laid in som calamus root, en I ain't gwine ter take no skuse,' sez Brer Fox, sezee."

Here Uncle Remus paused, and drew a two-pound yam out of the ashes.

"Did the fox eat the rabbit?" asked the little boy to whom the story had been told.

"Dat's all de fur de tale goes," replied the old man. "He mout, en den agin he moutent. Some say Jedge B'ar come long en loosed 'im—some say he didn't. I hear Miss Sally callin'. You better run 'long." —From Uncle Remus Tales.

5. Song: OLD BLACK JOE. By Stephen Foster.

Gone are the days when my heart was young and gay,
Gone are the friends from the cotton fields away,
Gone from the earth to a better land I know,
I hear their gentle voices calling, "Old Black Joe."

(Chorus)

I'm coming, I'm coming, for my head is bending low,
I hear those gentle voices calling, "Old Black Joe."

Why do I weep when my heart should feel no pain?
Why do I sigh that my friends come not again,
Grieving for forms now departed long ago,
I hear their gentle voices calling, "Old Black Joe."

Where are the hearts once so happy and so free?
The children so dear that I held upon my knee?
Gone to the shore where my soul has longed to go,
I hear their gentle voices calling, "Old Black Joe."

LEE'S BIRTHDAY.

January 19.

SUGGESTIVE PROGRAM.

1. Prayer by visiting minister.

2. Song: DIXIE. By Don Emmet.

I wish I was in de land ob cotton,
Old times dar am not forgotten,
Look away, Look away, Look away, Dixie Land.
In Dixie Land whar I was born in,
Early on one frosty mornin'
Look away, Look away, Look away, Dixie Land.

(Chorus)

Den I wish I was in Dixie, Hooray, Hooray,
In Dixie Land I'll take my stand,
To lib and die in Dixie,
Away, Away, Away down South in Dixie,
Away, Away, Away down South in Dixie.

3. Reading: LIFE OF LEE.

Robert Edward Lee was born in Stratford, Westmoreland County, Virginia, January 19, 1807 and died in Lexington, Virginia, October 12, 1870. He was a graduate of West Point Military Academy. He was appointed second lieutenant of engineers after his graduation in 1829, and was assigned to duty in Hampton, Virginia. From 1834 to 1837 he was in Washington, assistant to the chief engineer. He became captain of engineers after a year in St. Louis, where he was engaged in superintending the improvement of the Mississippi. He served in the Mexican war under General Scott; then for three years was stationed at Baltimore, becoming superintendent of the Academy at West Point in 1855. At the end of this time he was ordered to Texas, to take command of the forces against the Indians. During leave of absence he commanded the troops which suppressed the John Brown raid in 1859. In 1861 he resigned as Colonel in the United States army, and later became commander-in-chief of the Confederate army. Several months after the close of the Civil War, he became president of Washington College (now Washington and Lee University).

—*Thompson's History of the United States.*

4. Address: Lee as the model character for boys and girls.

5. Reading: An incident in the Life of Lee.

ROBERT E. LEE, GENTLEMAN.

From the Blue Book of Stories.

It is generally agreed that a gentleman is one who is marked by his consideration for others and, judged by this standard, Robert E. Lee, of all our public men, notably possessed this, as well as the other civic virtues.

Descended though he was from one of the proudest and most noble families of the country, General Lee was always marked by sympathy and fellow-feeling for people everywhere, particularly for the poor and unfortunate.

On one occasion near the close of the war, President Davis summoned him to Richmond for a conference. After it terminated, General Lee entered a train going in the direction of his headquarters with the army.

He seated himself near the rear of the coach and was busily engaged with the plans and papers which he had been discussing with President Davis. The train was crowded and just before it left Richmond, a poor woman came down the car trying to find a seat. She had been peddling vegetables in the city during the day and was now returning to her home. Soiled and begrimed from her work, with her large baskets on her arm, she was not a very pleasant companion in the estimation of the handsomely dressed men and women. She went down the car, therefore, without receiving any recognition and it looked as though she would have to stand up after her day of toil during the passage home. When she came to the seat which was occupied by General Lee, however, he looked up from his papers and saw her plight. Immediately, with the unfailing courtesy which marked his whole career, he rose to his feet and said: "Madam, I see you are weary. Wont you share this seat with me?" The incident was noted by all the passengers and many had the grace to blush as they took to themselves the lesson taught by their great leader.

This was not an isolated incident, but was characteristic of his entire life and made him the ideal of those Virginians of the Valley —

"The knightliest of a knightly race,
Who since the days of old,
Have kept the lamp of victory,
Alight in hearts of gold."

GEORGIA DAY.

February 12.

SUGGESTIVE PROGRAM.

1. Song by School: GEORGIA LAND.

GEORGIA LAND.

(Tune, *"Maryland, My Maryland."*)

Love, light and joy forevermore,
Georgia Land, dear Georgia Land!
The world finds welcome at thy door,
Georgia Land, dear Georgia Land!
Thy star-crowned hills and valleys sweet,
Their litanies of love repeat,
And night and morning singing meet;
Georgia Land, dear Georgia Land!

Where'er thy loving children roam,
Georgia Land, dear Georgia Land!
With thee their hearts are still at home,
Georgia Land, dear Georgia Land!

Where'er the wand'rer's pathway lies,
In dreams he sees thy blessed skies,
And hope doth like a star arise,
Georgia Land, dear Georgia Land!

Blest be thy holy hills and plains,
Georgia Land, dear Georgia Land!
The sunlight, twinkling thro' thy rains,
Georgia Land, dear Georgia Land!
God have thee ever in his keep,
From mountain wall to stormy deep,
Until upon thy breast we sleep,
Georgia Land, dear Georgia Land!

—*Frank L. Stanton.*

2. Reading: FACTS ABOUT GEORGIA.

Georgia has an area of 59,475 square miles, of which 495 are water, and is the largest State east of the Mississippi. There are three distinct divisions, north, middle and south Georgia. The highest mountains are in Towns County, Sitting Bull having an elevation of 5,046 feet above sea level and Mona 5,039 feet. Stone Mountain, 16 miles from Atlanta, is a solid mass of granite, 1,688 feet high. There are nine climate belts found in the United States and eight of these are represented in Georgia. In the northern part of the State the average July temperature is from 75 to 80 degrees and in the southern from 80 to 85 degrees. The average rainfall is 49 inches, the highest at Rabun Gap and lowest at Swainsboro.

The soil is generally fertile. In the middle section it is usually red and in the southern sandy. Texas is the only State in the Union which produces more cotton. Georgia watermelons, peaches, sugar cane and other agricultural products are widely known. In the southern part of the State there are large forests of long leaf pine which furnish excellent lumber, turpentine, and resin. The northern section has considerable mineral resources; gold, iron, aluminum, marble, slate and even precious stones are found in several counties.

The census of 1920 shows a total population of 2,894,683. Largely an agricultural State, the majority of her people taking part in this industry, Georgia stands in the front rank of the southern States in manufacturing. The largest cotton mills are at Augusta and Columbus, which are near the extremes of the "fall line" which separates the middle from the southern section. The largest cities in the State are Atlanta, Savannah, Augusta, Macon and Columbus. There are 160 counties in Georgia.

3. Address by Principal or Visitor: The Roll Call of Late Georgians.

4. Essay: CHEROKEE ROSE.

5. Address by the President of the Woman's Club or Parent-Teacher Association.

WASHINGTON'S BIRTHDAY.

February 22.

SUGGESTIVE PROGRAM.

1. Song by School: THE STAR SPANGLED BANNER. Francis Scott Key.

Ah, say can you see by the dawn's early light,
What so proudly we hailed at the twilights' last gleaming?
Whose broad stripes and bright stars thro' the perilous fight,
O'er the ramparts we watched, were so gallantly streaming,
And the rockets' red glare, the bombs bursting in air,
Gave proof thro' the night that our flag was still there.
Oh! say does the star spangled banner yet wave
O'er the land of the free and the home of the brave!

On the shore, dimly thro' the mist of the deep,
Where the foe's haughty host in dread silences reposes,
What is that which the breeze, o'er the towering steep,
As it fitfully blows, half conceals, half discloses?
Now it catches the gleam of the morning's first beam,
In full glory reflected, now shines on the stream.
'Tis the star spangled banner, oh, long may it wave,
O'er the land of the free and the home of the brave.

Oh! thus be it ever when free men shall stand
Between their lov'd home and the war's desolation,
Blest with victory and peace, may the Heav'n rescued land
Praise the Pow'r that hath made and preserved us a nation.
Then conquer we must, when our cause it is just,
And this be our motto, "In God is our trust."
And the star spangled banner in triumph shall wave,
O'er the land of the free and the home of the brave.

2. Reading: THE LIFE OF WASHINGTON.

3. Address by principal or visitor: THE VALUE OF TRUTHFULNESS.

4. Reading: THE STORY OF WASHINGTON AND THE CHERRY TREE.

When George Washington was quite small his father gave him a bright new hatchet. He was eager to try its sharp edge and unfortunately wandered into the orchard anxious to show his skill in cutting down trees. There seemed a large number of them and he thought it could not be more harmful for him to use his hatchet upon them than for his father's workmen to cut down the great oaks and pines in the forest. In a few minutes he had chopped down a young cherry tree which scattered the red fruit on the ground in its fall.

When his father saw that his fine young tree had been ruined, he

was, of course, very angry. He asked who had done it and said that severe punishment must come to the one who had cut down so fine a tree. "Did you do it, George?" asked the father. "Yes," said the little fellow, "I cannot tell a lie, I did it with my hatchet." The shade of vexation passed away from his father's face as he smiled at the courage and truthfulness of his son, and he said, "I would rather lose a thousand cherry trees than for you to tell me a falsehood."

5. Reading: THE MODESTY OF GEORGE WASHINGTON.

ARBOR AND BIRD DAY.

First Friday in December.

SUGGESTIVE PROGRAM.

1. Song: AMERICA.

2. Reading: TREES.

TREES.

The fact that we of the South are an agricultural people would suggest that long ago it would have been wise to give more attention to the life about us—the trees, plants, birds and insects—in other words, that life generally studied under what is known as Biology. The truth is, however, that it is the last to be placed in the curricula of our schools and has hardly obtained a good footing as yet except in a few instances. There is a practical as well as aesthetic value to this subject that is well worth the attention of any man. They are already beginning to find this the case in some of the older States. Some of the New England Commonwealths, for instance, have "tree wardens" and one of the duties of these officials is to give attention to the trees within their jurisdiction and to place the Seal of State upon those of value to the community generally. When this is done even the owner of the land cannot touch them with an axe or injure them in any way.

Those of you who have read Oliver Wendell Holmes will recall his division of the trees into classes and how he would gladly take a long journey at any time to see a notable specimen. To be among the great, its trunk must have a girth of 7 yards at a height of ten feet from the ground, and its branches have a spread of more than one hundred feet. The truth is, it is a crime against any community to cut down one of these great creations.

Despite their beauty, however, these monarchs of the forest are at the mercy of any silly fool who may wish a little firewood or merely desire to test the qualities of a new axe. In a few hours he can destroy forever a creation that has been fifty years in growing.

One reason why the average man does not care particularly for trees is because he has never been introduced to them and interest cannot be aroused except through individual knowledge and recognition. A tree

should be known, just as a man, through individual as well as family name. Some good book on the subject, such as Lounsbury's Guide, should be read and the effort to make their acquaintance is not only worth while but in addition will add pleasure to any walk through field or forest.

The Oak family is the most characteristic perhaps of the hard wood trees in this State. Its family name is *Quercus*—the red oak is *Quercus rubra,* the white oak is *Quercus alba,* etc. The Hickory is another. Its family name is *Hicoria* and the two leading individuals belonging to it with us are *Hicoria alba* or the white hickory and *Hicoria aquatica,* the pecan.

Some of the trees have a beauty not only of form but also of flower which is rarely observed. For instance the tulip tree—which is commonly and incorrectly called the poplar. High among its branches, sometimes a hundred feet from the ground, there is as perfect a tulip as any ever grown on a city lawn each spring of the year. The bees know the dainty yellow and green flowers and appreciate their perfume and pollen even if mankind does not. Of the real poplars we have three ordinarily found among us, the silver, Carolina, and the Lombard, *Populus tremuloides, Populus deltoides* and *Populus dilatata.* The last of these is a foreigner and came to us about a hundred years ago from the Lombard region of northern Italy. The silver poplar is sometimes called the aspen and is easily recognized from the white undersurface of the leaf and the slender tendril which causes it to quiver with the slightest breeze.

Perhaps the most striking tree in the early spring time is the red bud, the scientific name which is *Cercis canadensis.* Its strange magenta red coloring is seen as the predominant note in any landscape of this State early in April. The striking peculiarity is that the colored blossoms appear before the leaves and, therefore, it is like an immense bouquet without the slightest concealment. Tradition says that it was from its branches that Judas hanged himself after betraying his Master and that each Easter it blushes for shame and on this account its literary name is the Judas Tree.

History and literature tell of the famous Talking Oak of Dodona, notable in classic Greece.

The great Elm at Cambridge under which Washington stood as he took formal command of the Continental Army is reverenced and protected by Massachusetts.

At Hartford the Charter Oak which preserved the written guarantee of the liberties of the Connecticut colony has long been famous in the history of our country.

Our own State of Georgia has a curiosity in the shape of the Tree that Owns Itself. It is in Athens and has attracted much attention In an effort to preserve it the owner, W. H. Jackson, made a deed to the tree itself of eight feet of ground on all sides of its trunk.

3. Prize Competition: To find one knowing and identifying the largest number of trees.

4. Song: LISTEN TO THE MOCKING BIRD.

LISTEN TO THE MOCKING BIRD.

I'm dreaming now of Hallie, sweet Hallie, sweet Hallie,
I'm dreaming now of Hallie, for the thought of her is one that never dies;
She's sleeping in the valley, the valley, the valley,
She's sleeping in the valley,
And the mocking bird is singing where she lies.

Chorus.

Listen to the mocking bird,
Listen to the mocking bird,
The mocking bird still singing o'er her grave;
Listen to the mocking bird,
Listen to the mocking bird,
Still singing where the weeping willows wave.

Ah! well I yet remember, remember, remember,
Ah! well yet I remember
When we gathered in the cotton side by side;
'Twas in the mild September, September, September,
'Twas in the mild September,
And the mocking bird was singing far and wide.

Chorus.

When the charms of spring awaken, awaken, awaken,
When the charms of spring awaken,
And the mocking bird is singing on the bough,
I feel like one forsaken, forsaken, forsaken,
I feel like one forsaken,
Since my Hallie is no longer with me now.

Chorus.

5. Address by principal or visitor: ECONOMIC VALUE OF BIRDS

MEMORIAL DAY.

April 26.

SUGGESTIVE PROGRAM.

1. Prayer by Principal or Minister.
2. Song by School: SOLDIERS' CHORUS.—GOUNOD.

SOLDIERS' CHORUS.

Glory and love to the men of old,
Their sons may copy their virtues bold,
Courage in heart and a sword in hand,
Yes, ready to fight or ready to die for Fatherland.

Who needs bidding to dare by a trumpet blown?
Who lacks pity to spare, when the field is won?
Who would fly from a foe, if alone or last?
And boast he was true, as coward might do, when past?

Glory and love to the men of old,
Their sons may copy their virtues bold,
Courage in heart, and a sword in hand,
Ready to fight for Fatherland.

3 Address: GEORGIA HEROES IN THE CIVIL AND WORLD WAR.

4. Recitation: RECESSIONAL.

RECESSIONAL.

God of our fathers, known of old —
Lord of our far-flung battle-line —
Beneath whose awful hand we hold
Dominion over palm and pine —
Lord God of Hosts, be with us yet,
Lest we forget — lest we forget!

The tumult and the shouting dies —
The captains and the kings depart —
Still stands Thine ancient Sacrifice,
An humble and a contrite heart.
Lord God of Hosts, be with us yet,
Lest we forget — lest we forget!

Far-called our navies melt away —
On dune and headland sinks the fire
Lo, all our pomp of yesterday
Is one with Nineveh and Tyre!
Judge of the Nations, spare us yet,
Lest we forget — lest we forget!

If, drunk with sight of power, we loose
  Wild tongues that have not Thee in awe —
Such boasting as the Gentiles use
  Or lesser breeds without the law —
Lord God of Hosts, be with us yet,
Lest we forget — lest we forget!

For heathen heart that puts her trust
  In reeking tube and iron shard —
All valiant dust that builds on dust,
  And guarding calls not Thee to guard —
For frantic boast and foolish word,
Thy mercy on Thy people, Lord! Amen.

— *Rudyard Kipling*

5. Song by School: THE BONNIE BLUE FLAG.

THE BONNIE BLUE FLAG.

We are a band of brothers
  And native to the soil,
Fighting for the property
  We gained by honest toil;
And when our rights were threatened,
  The cry rose near and far —
"Hurrah for the Bonnie Blue Flag
  That bears the single star."

Chorus.

Hurrah, hurrah!
  For Southern rights hurrah!
Hurrah for the Bonnie Blue Flag
  That bears the single star.

First gallant South Carolina
  Nobly made the stand;
Then came Alabama,
  Who took her by the hand;
Next quickly Mississippi,
  Georgia and Florida
All raised on high the Bonnie Blue Flag
  That bears the single star.

— *Harry McCarthy.*

6. Recitation: BIVOUAC OF THE DEAD. O'Hara.

BOOKS ADOPTED FOR THE PRIMARY AND GRAMMAR GRADES, GEORGIA SCHOOLS, 1919-1924.

READERS:

Primary Basal —	Selling Price	Exchange Rate
Practical Primer, American Book Company	$ .16	$
Practical First Reader, American Book Company	.18	
Practical Second Reader, American Book Company	.20	
Practical Third Reader, American Book Company	.27	
Practical Fourth Reader, American Book Company	.50	.25
Graded Literature, Reader, Fifth Book, Charles E. Merrill Co., Southern School Book Dep., Atlanta	.40	
Elson Reader, Sixth Grade, Scott, Foresman & Co., Southern School Book Dep., Atlanta	.44	.22
Elson Reader, Seventh Grade, Scott, Foresman & Co., Southern School Book Dep., Atlanta	.52	.26
Powell's Spirit of Democracy, Rand, McNally Co., Southern School Book Dep., Atlanta	.65	.32
Secondary Basal —		
Reading Literature Primer, Row, Peterson Co., Southern School Book Dep., Atlanta	.25	.12
Riverside First Reader, Houghton Mifflin Co., Southern School Book Dep., Atlanta	.30	.15
Riverside Second Reader, Houghton Mifflin Co., Southern School Book Dep., Atlanta	.35	.17
Riverside Third Reader, Houghton Mifflin Co., Southern School Book Dep., Atlanta	.40	.20
Riverside Fourth Reader, Houghton Mifflin Co., Southern School Book Dep., Atlanta	.45	.22
Riverside Fifth Reader, Houghton Mifflin Co., Southern School Book Dep., Atlanta	.45	.22
Riverside Sixth Reader, Houghton Mifflin Co., Southern School Book Dep., Atlanta	.45	.22
Riverside Seventh Reader, Houghton Mifflin C., Southern School Book Dep., Atlanta	.45	.22
ARITHMETIC.		
Morey's Little Folks Number Book, Chas Scribners' Sons	.34	
Wentworth-Smith Essentials of Arithmetic, Primary Book, Ginn & Company	.34	.17
Wentworth-Smith Essentials of Arithmetic, Intermediate Book, Ginn & Company	.38	.19
Wentworth-Smith Essentials of Arithmetic, Advanced Book, Ginn & Company	.42	.21
GRAMMAR.		
Maxwell, Johnson and Barnum's Speaking and Writing, Book I, American Book Company	.25	.12
Modern Course in English, Book I, D. C. Heath Co.	36	.18
Modern Course in English, Book 2, D. C. Heath Co.	.46	.23

GEOGRAPHY.		
Frye's New Geography, Book I, with Georgia Supplement, Ginn & Company	.83	.41
Tarr & McMurray's World Geographies, Second Book, Special Georgia Edition, Macmillan Co.	1.00	.50
HISTORY.		
Evans' First Lessons in American History, Benj. H. Sanborn Co..,Southern School Book Dep., Atlanta	.45	.22
Brooks' Simplified History of Georgia, Atkinson, Mentzer Company, Southern School Book Dep., Atlanta	.60	.30
Mace-Tanner Old Europe and Young America, Rand McNally Co., Southern School Book Dep., Atlanta	..61	.30
Evans' Essential Facts of American History, Benj. H. Sandborn Co., Southern School Book Dep., Atlanta	.70	
AGRICULTRUE.		
Benson & Bett's Agriculture, Southern Edition, Bobbs-Merrill Co., Southern School Book Dep., Atlanta	.70	.35
PHYSIOLOGY.		
Jones, Keep Well Stories, J. P. Lippincott Company, Southern School Book Dep., Atlanta	.45	
Ritchie-Caldwell Primer of Hygiene & Sanitation, World Book Co., Southern School Book Dep., Atlanta	.50	
Winslow's Healthy Living, Chas. E. Merrill Co., Southern School Book Dep., Atlanta	.64	.32
CIVICS.		
Lapp & Brooks' Elements of Civics, Georgia Edition, Bobbs-Merrill Co., Sou. School Book Dep., Atlanta	.70	.35
SPELLING.		
Hunt's Modern Word Book for Primary Grades, American Book Company	.16	.08
Hunt's Elementary School Speller, Complete, American Book Company	.24	.12
WRITING.		
Berry's Writing, Books I to VII, Southern School Book Dep., Atlanta	.05	
RECOMMENDED.		
Thomas' Blanks for Written Spelling, Clanton & Webb, Atlanta	.05	
Practical Drawing, Modern Arts Course, Southern School Book Dep., Atlanta		
Books 1, 2, 3 and 4, 15 cents each; with Practice Paper	.20	
Books 5, 6, 7 and 8, 20 cents each; with Practice Paper	.25	

Exchange rates have been secured from January 1, 1920 to January 1, 1921.

MINIMUM STATE COURS

	READING		WRITING	ARITHMETIC	LANGUAGE and GRAMMAR
	PRIMARY BASAL	SECONDARY BASAL			
FIRST READER CLASSES	Practical Primer and Practical First Reader.	Reading Literature Primer. Riverside First	Copying Words and Sentences on Tablet. Berry's Writing Book I.	Counting and Writing Numbers. No Text required.	Oral Language Lessons. No Text Required
SECOND READER CLASSES	Practical Second Reader.	Riverside Second Reader.	Berry's Writing Book II.	Morey's Little Folk's Number Book.	Oral and Written Language Lessons. No Text Required
THIRD READER CLASSES	Practical Third Reader.	Riverside Third Reader.	Berry's Writing Book III.	Wentworth-Smith Primary Book, to page 146.	Speaking and Writing Book by Maxwell, Johnson & Barnum.
FOURTH READER CLASSES	Practical Fourth Reader.	Riverside Fourth Reader.	Berry's Writing Book IV.	Wentworth-Smith Primary Book Completed	Modern Course in English Book I, Part 1, to Page 172.
FIFTH READER CLASSES	Graded Literature Fifth Reader.	Riverside Fifth Reader.	Berry's Writing Book V.	Wentworth-Smith Intermediate Book to Page 140.	Modern Course in English Book I Completed.
SIXTH READER CLASSES	Elson's Sixth Grade Reader.	Riverside Sixth Reader.	Berry's Writing Book VI.	Wentworth-Smith Intermediate Book Completed.	Modern Course in English Book II to Page 144.
SEVENTH READER CLASSES	Elson's Seventh Grade Reader. Powell's Spirit of Democracy.	Riverside Seventh Reader	Berry's Writing Book VII.	Wentworth-Smith Advanced Book Completed	Modern Course in English Book II Completed.

NOTE.

1. Rural schools with one and two teachers and short terms are not required to use the sixth and seventh grade readers, nor Winslow's Healthy Living.

2. Primary Basal Readers are to be used before the Secondary.

3. In schools having only one teacher, it may be necessary to alternate some studies.

FOR ELEMENTARY GRADES.

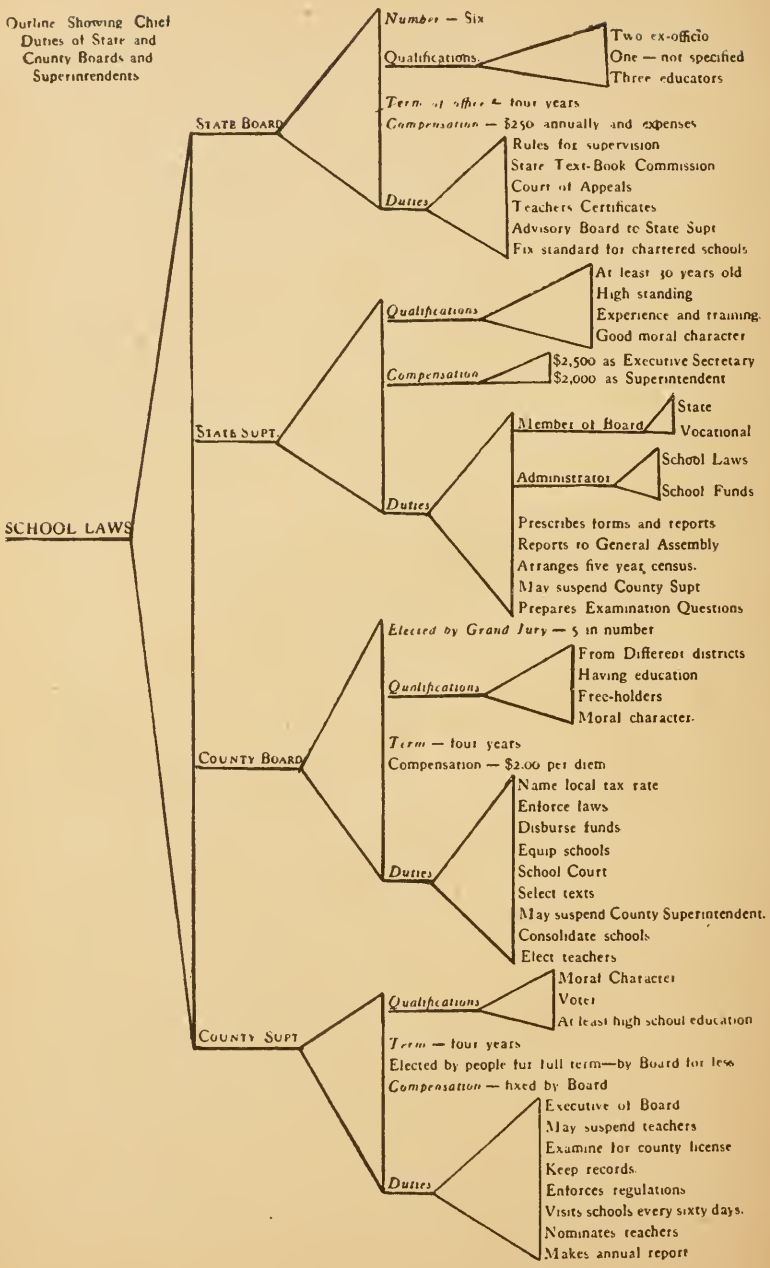
HISTORY AND CIVICS	SPELLING	GEOGRAPHY	PHYSIOLOGY	AGRICULTURE
Obedience, Courtesy and the other Virtues, Taught by Story and Illustration. No Text Required.	Hunt's Modern Words for Primary Grades to Page 35.	Simple Oral Work. in Home Geography. No text required.	Health Talks and Physical Culture. No Text Required.	Nature Study and Home Economics. No Text Required.
Stories of Great Men and Women. Reproduction. No Text Required.	Hunt's Modern Words for Primary Grades Completed.	Oral Work. in Home Geography. No text required.	Health Talks and Physical Culture. No Text Required.	Nature Study and Home Economics. No Text Required.
Stories of Great Men and Women. Reproduction. No text Required.	Hunt's Complete Speller to Page 62.	Oral Work. in Home Geography. No text required.	Health Talks and Physical Culture. No Text Required.	Nature Study and Home Economics. No Text Required.
Stories of Great Men and Women. Reproduction. No text Required.	Hunt's Complete Speller to Page 113.	Frye's New Geography, Book I, to Page 112, and Georgia Supplement.	Health Talks and Physical Culture. No Text Required.	Nature Study and Home Economics. No Text Required.
Evans' First Lessons in American History.	Hunt's Complete Speller to Page 142.	Frye's New Geography, Book I, Completed.	Jones' Keep Well Stories.	Nature Study and Home Economics. No Text Required.
Mace-Tanner Old Europe and Young America. Brooks' History of Georgia.	Hunt's Complete Speller to Page 176.	Tarr & McMurray's World Geographies, Second Book to Page 177.	Ritchie-Caldwell Primer of Hygiene and Sanitation.	Nature Study and Home Economics. No Text Required.
Evans' Essential Facts of American History and Lapp & Brooks' Elements of Civics	Hunt's Complete Speller. Review Entire Book.	Tarr & McMurray's World Geographies, Second Book Completed.	Winslow's Healthy Living (Optional).	Benson & Betts Agriculture. Southern Edition.

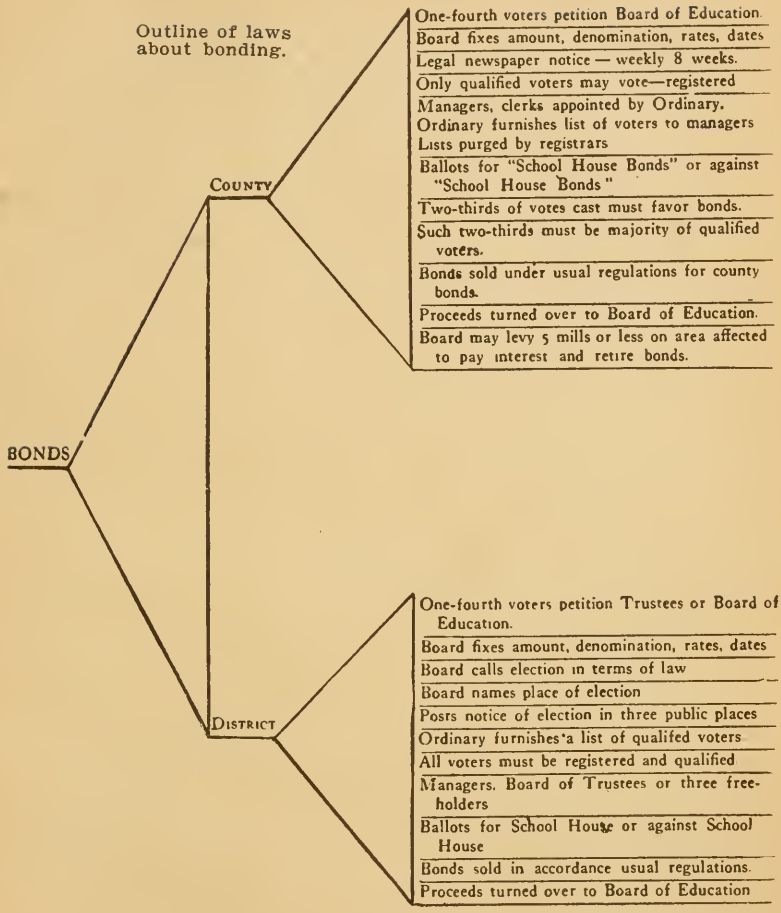
4. Require Composition work, letters, written exercises and declamations in connection with the regular lessons.

5. The School Law requires pupils to take all the studies in their respective grades. Require written examinations. Those pupils of the seventh grade who make an average of 75 per cent in the seventh grade annual examination, may receive a Certificate.

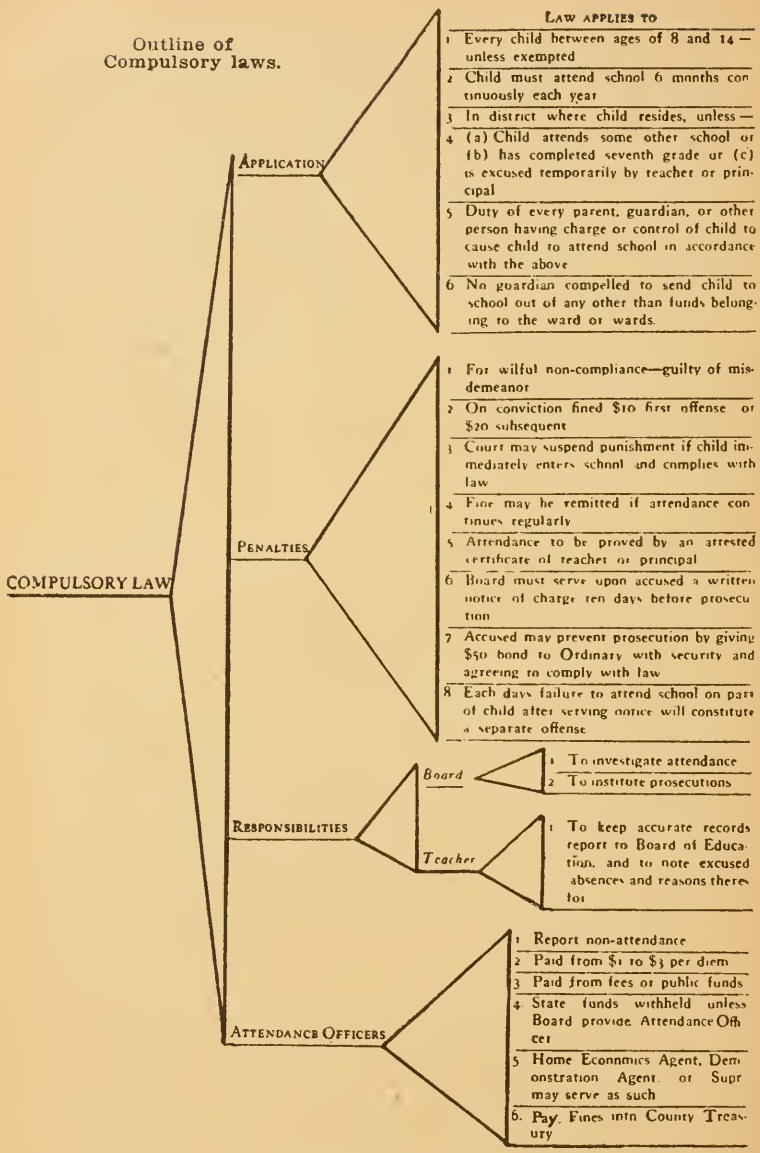
M. L. BRITTAIN,
State Supt of Schools.

For High School course see High School Section of Manual.


Outline Showing Chief Duties of State and County Boards and Superintendents
SCHOOL LAWS
STATE BOARD
Number — Six
Qualifications
Two ex-officio
One — not specified
Three educators
Term of office — four years
Compensation — $250 annually and expenses
Duties
Rules for supervision
State Text-Book Commission
Court of Appeals
Teachers Certificates
Advisory Board to State Supt
Fix standard for chartered schools
STATE SUPT.
Qualifications
At least 30 years old
High standing
Experience and training
Good moral character
Compensation
$2,500 as Executive Secretary
$2,000 as Superintendent
Duties
Member of Board
State
Vocational
Administrator
School Laws
School Funds
Prescribes forms and reports
Reports to General Assembly
Arranges five year census.
May suspend County Supt
Prepares Examination Questions
COUNTY BOARD
Elected by Grand Jury — 5 in number
Qualifications
From Different districts
Having education
Free-holders
Moral character.
Term — four years
Compensation — $2.00 per diem
Duties
Name local tax rate
Enforce laws
Disburse funds
Equip schools
School Court
Select texts
May suspend County Superintendent.
Consolidate schools
Elect teachers
COUNTY SUPT
Qualifications
Moral Character
Voter
At least high school education
Term — four years
Elected by people for full term—by Board for less
Compensation — fixed by Board
Duties
Executive of Board
May suspend teachers
Examine for county license
Keep records.
Enforces regulations
Visits schools every sixty days.
Nominates teachers
Makes annual report


Outline of laws about bonding.
BONDS
COUNTY
One-fourth voters petition Board of Education.
Board fixes amount, denomination, rates, dates
Legal newspaper notice — weekly 8 weeks.
Only qualified voters may vote—registered
Managers, clerks appointed by Ordinary.
Ordinary furnishes list of voters to managers
Lists purged by registrars
Ballots for "School House Bonds" or against "School House Bonds"
Two-thirds of votes cast must favor bonds.
Such two-thirds must be majority of qualified voters.
Bonds sold under usual regulations for county bonds.
Proceeds turned over to Board of Education.
Board may levy 5 mills or less on area affected to pay interest and retire bonds.
DISTRICT
One-fourth voters petition Trustees or Board of Education.
Board fixes amount, denomination, rates, dates
Board calls election in terms of law
Board names place of election
Posts notice of election in three public places
Ordinary furnishes a list of qualifed voters
All voters must be registered and qualified
Managers, Board of Trustees or three freeholders
Ballots for School House or against School House
Bonds sold in accordance usual regulations.
Proceeds turned over to Board of Education

Outline of Compulsory laws.


COMPULSORY LAW
APPLICATION
LAW APPLIES TO
1 Every child between ages of 8 and 14 — unless exempted
2 Child must attend school 6 months continuously each year
3 In district where child resides, unless —
4 (a) Child attends some other school or (b) has completed seventh grade or (c) is excused temporarily by teacher or principal
5 Duty of every parent, guardian, or other person having charge or control of child to cause child to attend school in accordance with the above
6 No guardian compelled to send child to school out of any other than funds belonging to the ward or wards.
PENALTIES
1 For wilful non-compliance—guilty of misdemeanor
2 On conviction fined $10 first offense or $20 subsequent
3 Court may suspend punishment if child immediately enters school and complies with law
4 Fine may be remitted if attendance continues regularly
5 Attendance to be proved by an attested certificate of teacher or principal
6 Board must serve upon accused a written notice of charge ten days before prosecution
7 Accused may prevent prosecution by giving $50 bond to Ordinary with security and agreeing to comply with law
8 Each days failure to attend school on part of child after serving notice will constitute a separate offense
RESPONSIBILITIES
Board
1 To investigate attendance
2 To institute prosecutions
Teacher
1 To keep accurate records report to Board of Education, and to note excused absences and reasons therefor
ATTENDANCE OFFICERS
1 Report non-attendance
2 Paid from $1 to $3 per diem
3 Paid from fees or public funds
4 State funds withheld unless Board provide Attendance Officer
5 Home Economics Agent, Demonstration Agent, or Supr may serve as such
6. Pay Fines into County Treasury

WHAT AN EIGHTH GRADE PUPIL OUGHT TO KNOW

To The Superintendent:

Teachers, parents, as well as the public generally, have the right to be assured with something like certainty as to what definite results follow from the time and expense attendant upon the seven or eight years of training in the public schools. These years of labor should point to clear end and aim, and if they succeed in endowing the future citizens of the State with the following qualifications they will amply justify all the money and effort expended.

1. Ability to speak and read the English language with fair accuracy.

2. Ability to write with fair legibility.

3. Ability to use the principles of arithmetic in ordinary business transactions.

4. Ability to spell at least the words used in ordinary discourse..

5. To know enough geography to appreciate current events, and to know something of the nations of the world.

6. To understand the leading facts of American history, and to feel a patriotic pride in the deeds of our fathers.

7. To know and appreciate the value of physiology and hygiene — what it means to have a healthful body and hygienic surroundings.

8. To know something of the plants, birds, trees and agricultural life of the vicinity.

9. Ability to write a business letter correctly and to be able to give intelligent reasons for opinions as to men and measures.

10. To be honest, trustworthy, obedient, truthful and polite.

SCHOOL HOUSE CONSTRUCTION

BY

J. O. MARTIN, State School Supervisor.

MISS ELIZABETH HOLT, Extension Dept., G. N. & I. College.

In Section 84 of the Georgia School Code is found the following regarding the construction of school buildings: "The construction of all public school buildings must be approved by the Superintendent and Board of Education and must be according to plans furnished by the County School authorities and the State Department of Education." Hence three things are plain:

1. That no community can build a schoolhouse without first securing the approved plans.
2. That the County Board of Education and the State Department of Education must furnish plans.
3. That the construction of the school houses must be approved by the County School Superintendent and Board of Education.

Therefore this article is written with the view of aiding in the hygienic features of school house construction.

I. THE SCHOOL SITE.

The school should be located in the most accessible place. The center of population, intersecting roads, streams and mountains, possibilities of transportation, and future enlargement of the building by means of consolidation, will necessarily govern the location of the building.

II. THE SCHOOL GROUNDS.

In selecting the school site, at least four important things, with reference to the grounds, should be taken into consideration.

(a) *Its suitability for play.* The grounds should be sufficiently level to enable the children to play comfortably and there should be ample ground for whatever play activities are needed. Steep hillsides, rocky places, gulleys, marshes, etc., do not serve for play-ground purposes. Undesirable sites are often selected because they are either donated or purchased cheaper. The absolute necessity for play in the training of the children demands that they have sufficient level ground on which to play.

(b) *The size of the lot.* No school grounds should contain less than

two acres of land. A one-teacher school demands this much, and larger schools demand much more.

(c) *The soil.* The soil should be, if possible, gray gravel and sand mixture with clay. A site of red soil should be the last to be selected. Children can not play in red mud. Aside from this the school room can not be kept clean when built on such a spot.

(d) *The drainage.* The ground should slope sufficiently to permit proper drainage.

III. The School Building.

A. *Foundation of building.* The foundation or under pinnings should be made of brick or stone and made strong enough to prevent the building from sagging. The spaces between the outside pillars and piers should be latticed in order to prevent cold winds from sweeping beneath, and to keep out animals.

B. *The School Room*:

1. Light—God said, "Let there be light; and there was light."—until men built school houses and shut it out. Since light was necessary at the beginning, it is necessary now, if children are to study properly and take care of their eyes.

There are at least five principles that govern the lighting of the school room:

(a) The light should be unilateral; that is to say, it should enter the room from one side only. Children read by light that falls on the printed page and since a sufficient amount of light can be obtained from one side of the room, the danger of eye strain, caused by shadows and cross rays admitted by windows on more than one side is avoided.

(b) The amount of light: the total number of square feet of glass per room should equal at least one-fifth of the total number of square feet in the floor space. One fourth the floor space would be much better.

(c) The proper orientation: the building should be built so that the light may enter the class room from either the east or the west. An eastern exposure permits the sun's rays to enter the room early in the morning and by ten o'clock the entire room has had a sun bath and the sun's rays give no trouble for the remainder of the day. A western exposure admits the sun late in the afternoon and the room gets its sunning mainly after the school is dismissed. There is but little difference in the advantages. One gives the room a sunny cheerful atmosphere early in the day but admits the rays of light in front of the children, if they are seated properly facing the south; while the other admits the sun over the left shoulder and from the rear. It also enables the teacher to place all maps and charts on the north side of the room.

The northern exposure should never be used for class-room purposes, because it is always dark and gloomy and more difficult to heat. The sun's rays can never enter the room and thereby give it a sunning for sanitary purposes. The southern exposure should never be used. First.

because the sun's rays are troublesome to those children who sit near the windows and hence the shades must be drawn to protect them and, by so doing, the light is shut off from those who sit further in along the north side of the room, second, because the sun is too high overhead to penetrate more than half the room, therefore failing partly in its sanitary mission.

(d) Placing of windows: The bottom of the windows should be at least four feet above the floor. This height puts the range of light above the eye level of the pupils when seated at their desks. The light then falls down on the printed page instead of being reflected up into the eyes of the pupils, as it does when the window level is placed below the eye level. The pupils of the eyes are then automatically adjusted to the light reflected from their books, whereas if the windows were lower, the stronger light from the outside, reflected directly into the eyes of the pupils, would command an unnatural adaptation of the pupils of the eyes, which not only causes physical discomfort but serious eye strain as well. LIGHT IS MADE TO SEE BY AND NOT TO LOOK AT.

2. The rear windows should extend to within eighteen inches of the rear of the wall if the structure of the building will permit. This throws the light from behind all the children when seated at their desks and removes possibility of any child's sitting in a line of darkness with the light shining in front of him. This fenestration applies to any school room regardless of the direction which it faces.

SOME FUNDAMENTAL PRINCIPLES.

1. *Adaptability to growth of the school*:

There are a great many school buildings in the State that have been added to from time to time with the following results:

1. Veritable fire-traps.
2. Great inconvenience for use.
3. Inadequate lighting system.
4. Insufficient ventilation.
5. Unsightly appearance.

Therefore, care should be taken to plan school houses that can be added to as the school grows, logically and economically, without handicapping the working efficiency of the school or the exterior appearance.

2. *Single-story buildings*:

CALIFORNIA is famous for her beautiful one-story school buildings. The safety of one-story school buildings in case of earthquake was the reason for their adoption, and now the beauty of these graceful schoolhouses in contrast with the massive, ill-proportioned many-story buildings of the past has carried their fame abroad.

CLEVELAND, OHIO, where land is costly, is now having all school

buildings planned on a one-story type. The reason for this was the Collingswood School fire in which one hundred and seventy-five school children were burned to death.

Already in Georgia people are coming to realize that there are many advantages in the one-story school house, and there are quite a number of such buildings in cities, towns, and rural sections. (See cut of Six-Teacher Unit-Type Schoolhouse.)

Consequently, for the following reasons, we urge the single-story Unit-Type schoolhouse:

1. Safety.
2. Convenience.
3. Economy.
4. Beauty of Appearance.

The *economy* of the single-story school building consists in the following points:

1. Walls not so thick as for the many story house.
2. Omission of heavy supporting beams between stories.
3. Omission of stairways.
4. Omission of fire-escapes.
5. Construction easier than in the case of many stories.
6. More easily and economically added to as the school grows than is the several-story building.

3. *Adaptability to modern education*:

The modern schoolhouse should be a workshop for many kinds of work. We are fast learning that "booklearning" is but a part of education, and that we must train for action as well as for thought — that achievement is not the result of thought *or* action, but of thought *and* action. Therefore, other rooms, the uses of which are equally as important as those of the class room and lecture room, must be included to function in the all-around complete development of the children and the community as a whole. A minimum of such accommodation should be as follows:

1. Library.
2. Science laboratory.
3. Home economics laboratory.
4. Manual training shop (in separate house).
5. Music room (separated from class rooms).
6. Medical examination room.
7. Coat and lunch room or lockers.
8. Auditorium.
9. Principal's office.
10. Teacher's rest room.
11. Showers and dressing room.

The single-story school house plan in our series of Unit-Type Plans which we have for use over the State, consists of the following accommodation:

1. Class room.
2. Home-size kitchen which can also be used for other work.
3. Library, office, dining room, combined.
4. Corridor with the following uses:
   (1) Coat and hat sections.
   (2) Lunch cabinets.
   (3) Umbrella stands.
   (4) Lavatories.
   (5) Drinking founts.
   (6) Art gallery.
   (7) Play hall.

This arrangement is in keeping with the prevailing idea that in the well-planned schoolhouse there should be no waste space throughout the day. To accomplish this:

1. In as far as possible, all of the rooms should be so planned and located that they can be used for more than one purpose.
2. The daily schedule should be so arranged that classes will use the rooms for various types of work alternately throughout the day.

4. *Some important measurements and specifications*:

1. Light in the class-room.
2. Ventilation.
3. Physical comfort.
4. Health conditions.
5. Conditions for efficient work.

5. *Light in the classroom* is controlled by the arrangement of the windows and the color of the walls.

Arrangement of Classroom Windows:

1. All windows in wall to left of desks.
2. Windows as close together as possible.
3. East or West exposures.
4. Glass area one-fifth floor area.
5. Front window 9 ft. back from front wall.
6. Rear window on line with rear desks.
7. Window sills 4 ft. above floor.
8. Tops of windows at ceiling line.
9. Ceiling height one-half width of room.
10. Dimensions of room—24 ft. wide; 32 ft. long; 12 ft. 6 inches high.
11. Size of window opening: 24 ft. long; 8 ft. high.

There should, by all means, be large air-vents in the walls opposite the windows to furnish cross-ventilation in warm weather, *but no light.*

Color of Classroom Walls and Ceilings.

The value of the light entering the classroom can be greatly increased by the color scheme. The principal points to be considered are as follows:

1. That the lower walls, or the wainscoting, should be of some subdued tone, to prevent light from being reflected up into the eyes.
2. That the upper walls and ceiling should be light in tone, to reflect the light downwards on the desks.

Dead white should not be used on the walls or ceiling of a class room because it is too glaring in effect. Tones of *blue* or *green* should not be used because the tendency is to absorb the light instead of reflecting it. Tones of *red* or *orange* should not be used because of their irritating effect on the nerves.

After working a great many experiments through actually painting classrooms, we have come to the conclusion that the following is the most desirable color scheme:

1. Wainscoting, 4 ft. high, *light* brown, using Flemish Oak Oil Stain.
2. Walls between wainscoting and picture moulding, *very light* tan, using New Ivory. Also trim of windows and vents.
3. Ceiling, down to picture moulding, *very light* cream, made by mixing some of the New Ivory in white paint.

Mullions: The windows should be placed with 12 inch mullions between. With proper supports above and studding between, this insures sufficient strength and, at the same time, affords space for window weights which should always be used where windows are set to slide up and down. The mullions should not be wider than one-foot because of the shadows that would be thrown across the room and cause eye strain.

Shades: Tan Draper shades, sold by Clanton & Webb Co., Atlanta, Ga., are found to be most serviceable. They can be raised from the bottom or lowered from the top in order that the light may be adjusted. The ordinary green roller shades are not satisfactory. They absorb the light and when drawn they shut out the light from above; this should never be done. In this connection let it be said that on sunny days shades should be rolled up to the top as soon as the rays of the sun have passed beyond the range of the desks and that on cloudy days they should never be drawn at all. Too many teachers never raise the shades during the day after they have been lowered in the morning of a sunny day. This makes the room extremely dark for study. HOW LONG WILL IT TAKE TEACHERS TO LEARN THAT CHILDREN CANNOT STUDY WITHOUT SERIOUS EYE STRAIN UNLESS THEY HAVE ENOUGH LIGHT AND GET IT FROM PROPER DIRECTION ?

Again, if there must be a northern exposure to the school house, why have shades over the windows? There is no sunshine to shut out; then why use them? They are not only dangerous because of their probability of being lowered, thereby shutting out the light where light

(on the north side) is most needed, but they are expensive besides and do no good.

Curtains: The ordinary curtains do more harm than good. They catch dust and shut out light. If curtains are used at all they should merely trim the upper and outer frames of the windows and should be laundered when needed. THEY SHOULD NOT SHUT OUT THE LIGHT.

Obstructions: Trees should not be permitted to stand where they obstruct the light. Light is more necessary to the child on the inside than shade is to the child on the outside.

Heat: Any building in which a central heating plant is not installed should have a jacketed heater in the rear of the room. (Get description from State Department of Education, Atlanta, Ga.) The jacketed heater has several advantages over the hot air stove placed in the center of the room:

(a) It affords even temperature for all parts of the room.
(b) It gives fresh air to every child all the time and helps to solve the problems of ventilation.
(c) It requires less fuel.
(d) It affords more space in the center of room for seating capacity.
(e) It lessens danger of fire.
(f) It gives more strength to the building, since the chimney is removed from the overhead ceiling and built on the side of the school-house.

Ventilation: If jacketed heaters are used instead of stoves, the problem of ventilation is solved, provided proper window adjustment is made. If hot air stoves are used in rooms where the windows are on more than one side of the room, ventilation may be obtained by raising the windows from the bottom and lowering from the top. When raised from the bottom window boards should be used to prevent a draft from blowing directly upon the pupils. When there is unilateral lighting, breeze windows should be placed above the blackboard, directly opposite the light windows to give cross ventilation. Unilateral lighting means unilateral ventilation, unless breeze windows are provided. Children must have fresh air all the time. It is the BREATH OF LIFE.

Cloak Rooms: Each room should have its own cloak room, with sufficient space for an individual section for each child's cloak, hat, and lunch. The lunch sections should be screened against flies. The cloak room serves best when built either at the rear or along one side of the class room. This places the doors in the rear of the room and leaves the front walls for blackboard space, provided the heater is also placed in the rear.

Blackboards: All of the available space on the left, front and rear of the pupils should be filled with blackboard of the best obtainable quality. Hylopate is generally used in the village and rural schools. It is a waste of money and time not to furnish the school with good blackboard. The standard heights from the floor for setting boards are as follows: Primary grades, 20 inches; intermediate grades, 22 inches; grammar grades, 26 inches; and none over 30 inches. The width of the boards should be at least 3 feet, 6 inches; 4 feet would be better. Chalk troughs should extend over the entire length of the board and should be covered with a removable wire screen. All boards should be framed so that the edges can not be mutilated by the children. (The boards should be painted with liquid slating when they become worn.)

Floors: The floors should be made of the best material possible and should be sub-floored. They should be thoroughly cleaned and oiled in order to keep down dust. (One part kerosene and two parts lubricating oil is a good mixture.) This preserves the floor also.

Seats: In every school there should be six sizes of seats: 1's and 2's; 3's and 4's; 5's and 6's. The seats should be single and in most cases, should be fastened to strips instead of to the floor. This makes it possible to remove the seats without difficulty. The rules for placing the seats are as follows:

(a) Rows should consist of seats of one size;
(b) Desks should overlap seats by at least two inches;
(c) Smallest seats should be nearest the windows;
(d) No seat should be more than 30 feet from the front blackboard.

The seats should be adjusted to the children instead of adjusting the children to the seats, and every child's feet should rest comfortably on the floor.

Rostrums: Do not permit them to be built. They are useless.

Steeples: Steeples cause leaks and are expensive.

Doors: For convenience and safety all doors should open outward. (All outside doors should be kept locked at night.)

The Physical Comfort of the pupils to a large extent controls their ability to learn. For instance, no one with cold feet can really concentrate their mind on study. The resulting effect on the state of mind and on the circulation of the blood, seriously handicaps attention to the work in hand. Therefore, the following points should be carefully looked after.

1. Air-tight floors with felt and sub-flooring beneath them.
2. Storm sheathing and felt between inner and outside walls.
3. Sufficient radiation of warm, fresh air during cold weather.
4. Comfortable seats of suitable sizes.

Utility Rooms: There should be as a part of every school building at least two rooms besides the class rooms; one, a library and reading room, and the other a cooking room. The first is essential, because it is necessary to have a separate place in which children may do reading and studying from texts and other books than those actually required. The second room is necessary on account of the growing tendency to supplement the cold lunches brought to school by the children. There should be a reformation in the manner in which children eat their noon day lunches in most of the schools of the state. It is a little less than barbarous to allow children to sit on logs, door steps, or the ground, and to eat with dirty hands without the care and attention of the teacher. The lunch period should be a part of the daily schedule and the children should be seated in an orderly manner in the room where the teacher supervises the meal, and if possible serves something hot as a supplement to the cold lunch brought by the children.

Assembly Rooms: An assembly room should be part of every school building. This may be used for chapel exercises, physical training, school entertainments, community meetings, etc. This is sometimes accomplished in part by throwing two class-rooms together. Sometimes this is done by a solid wall being built between; this has a central space in which are placed two pieces of removable blackboards four feet wide, and three feet from the floor. The board is fastened with small turn buttons and can easily be removed.

Toilets: The only sanitary toilet that can be built is the septic tank. This when properly attended to, is no care to the school or patrons, and in the meantime, the dangers from typhoid, hookworm, and other diseases are lessened. They are easily constructed at a minimum cost and should be built at every school and home where there is no sewage system. (Blue prints may be obtained from the State Department of Health, Atlanta, Ga.)

Wells and Springs: The well or spring should be kept free from surface drainage and foreign substances. The health of the children, from the standpoint of typhoid and other germ diseases, demands that the water be kept pure and handled in a sanitary manner. (Samples of water may be sent to the Engineer, State Board of Health, Atlanta, Ga.)

Before building or remodelling a school building the County School Superintendent should see that the proper plans are obtained before the work of construction is begun. Plans may be obtained directly from the State Department of Education at any time. Too often school houses are built without the aid of any one who knows anything about the principles of the hygiene of construction and as a result of such methods, we have copies of copies of copies which have been handed down to us since the first church houses were built in our country.

To Recapitulate: The County Superintendents of Schools and the State Superintendent of Schools shall furnish all plans for school buildings and the County Superintendent of Schools and the County Board

of Education shall approve the construction of all the buildings. The school should be located at the most suitable place as to convenience, centrality of location, play-ground, drainage, etc. The building should be planned with reference to future enlargement and consolidation. Besides the class rooms, the building should contain, if possible, an assembly room and two utility rooms. The under-pinnings should be such as to insure the security of the building. The spaces between the pillars should be latticed. The school rooms should face either east or west, with light entering from one side only; the amount of window space in a room should equal at least one-fifth of the floor space; the windows should be placed four feet above the floor, nine feet, if possible, from the front wall, six inches from the ceiling, and one and one-half feet from the rear wall. The paint should be white or cream overhead; walls very light cream, baseboards dark brown; standard size of room 24x32x12½ feet. Floors should be double and kept oiled. A central heating plant should be installed in schools where there are more than three teachers; in schools of smaller size jacketed stoves (instead of hot-air stoves) should be placed at the rear of the class room. Cloak rooms with individual sections for each child should be built for all class rooms. All doors should open outward; the school building should have at least two acres of ground which should be level and suited for the purposes of play. Toilets should be built over septic tanks. The well or spring should be protected from all surface drainage and seepage water.

Conclusion.

It is our desire and endeavor to help in as concrete a way as possible to have all of the foregoing suggestions carried out in the new buildings that will be erected from time to time.

To help in this, we have certain plans that we will furnish on request. There is no State appropriation of funds for the drawing of other plans, and if none of the plans that we already have will suit a given condition, we will assist in having suitable plans drawn for a minimum cost. A part of every building fund could be put to no more helpful or economical use than to pay for plans and proper supervision of construction. Most of the buildings erected in the past show a woeful lack of both.

We have a bulletin on schoolhouse plans that explains in more complete detail the principles outlined in this article, and we will be glad to send it on request.

We shall be glad to visit your community to help promote interest in the matter of better schoolhouse conditions, or to correspond with any of your patrons with this in view.

We are at your service to help in every way possible to promote the cause of well-planned and finely constructed schoolhouses throughout the State—first, by helping you to show the people what they should require in their schoolhouses—second, by helping you and them to get it.

Write us about your particular problem.

SYSTEM OF CERTIFICATION

The State Board of Education has revised and made many changes in the system of certification for the year beginning with January, 1921. In making these changes we have had the aid of Professors Lois Rogers, Wesleyan College; T. J. Woofter, University of Georgia; Peyton Jacobs, Mercer University; Dr. J. S. Stewart, High School Inspector, and the Vocational Supervisors.

I. LICENSE BY EXAMINATION ONLY.

These certificates are obtained through the regular State examination. This occurs each year after the conclusion of the summer school work. The questions are uniform and sent to each county or city superintendent from the State Department of Education. After the papers are graded the superintendent presents the general averages obtained to the local board and this body grants licenses in accordance with the marks obtained as shown below. The minutes of the board for future reference must show the general averages and the certificates given.

1. PRIMARY.

The Primary license is intended for those teachers doing the work of the first four classes. There are three grades—1, 2, 3—for those averaging above 90 per cent, 75 per cent, and 60 per cent, respectively. A license of 1st grade shall be valid for three years, of 2d grade for two years, and of third grade for one year. The Primary examination is based on the following subjects: Reading, Writing, Spelling, Arithmetic (to percentage), Language Lessons and Composition, Elementary Geography and the texts of the Teachers' Primary and Elementary Reading Course.

2. GENERAL ELEMENTARY.

In addition to the questions for the teachers engaged in primary work, applicants for the General Elementary license are required to take an examination upon the following subjects: Arithmetic, Grammar, History (U. S.) and Civics, Geography, Physiology, and Agriculture. The grades, the respective averages for the same and the periods of validity shall be the same as for the Primary license.

Those teachers who attain first grade, either Primary or General Elementary, may renew their licenses on condition of three years' successful experience in teaching and the completion of the reading course. (See "Conditions Governing Renewals.")

Note.—The reading course for 1921 consists of Dresslar's School Hygiene, Woofter's Teaching in Rural Schools, and the Manual of Methods

3. High School and Supervisory.

In addition to the above, provision is made for license to teach in a high school through a satisfactory examination passed on any three of the following groups, the three selected to include the subjects the holder of the license is permitted to teach, and the High School and Supervisory Teachers' Rural Course.

(1) Mathematics: Arithmetic; Algebra, through quadratics; Plane Geometry.

(2) English: Grammar; Composition and Rhetoric; English and American Literature.

(3) Science:Agriculture; Physics; Biology (Elementary Physiology, Botany, Zoology).

(4) Languages: Latin, French, Spanish, Greek. Take any two.

(5) History: Ancient; Modern; English.

In addition to these three groups elected from the above the examination must include school management and methods of teaching high school subjects.

Note.—The questions on school management and methods for 1921 will be based upon the Manual of Methods, Smith's All the Children of all the People, and Rapeer's Consolidated Rural School.

The examination for these certificates will be held at the same times and places as those for General Elementary license, the questions to be prepared and sent to the county or local superintendents who will conduct the examinations and issue licenses as in the case of General Elementary licenses.

An average of 90 per cent on all subjects shall entitle the candidate to a license of first grade valid for three years; an average of 75 per cent, to a license of second grade valid for two years; and an average of 60 per cent, to a license of third grade valid for one year. A license of first grade may be renewed for periods of three years upon satisfactory evidence of three years of successful teaching and upon the completion of the prescribed reading course. (See conditions Governing Renewals.)

Special Examinations.

At any time Boards of Education have the right to authorize superintendents to give special examinations in cases of emergency through which teachers can obtain a temporary license good until the next regular State test.

II. PROFESSIONAL CERTIFICATE.

The following State Professional Certificates are provided, the same to be granted on examination directed by the State Board of Education.

4. PROFESSIONAL NORMAL CERTIFICATES.

(A) A graduate of an approved Normal School of the State of Georgia, the prescribed curriculum of which extends at least two years beyond the high school and the course completed by the graduate to include psychology, general and educational, the equivalent of 3 hours a week throughout a scholastic year; methods, management and school hygiene, the equivalent of 3 hours a week throughout the year; history of education, the equivalent of 3 hours a week for one-half the year; and observation and teaching, the equivalent of 3 hours a week for one-half the year; and who qualifies through examination as directed by the State Board of Education, shall be eligible for a Professional Normal Certificate.

Examinations for these certificates may be conducted at the said Normal Schools as ordered by the State Board of Education, and are to be supervised in whole or in part by a State Supervisor of Schools or other examiner as designated by the State Superintendent of Schools for each year of said Normal Schools, and a certificate granted thereon shall be valid for three years, and capable of renewal thereafter for an indefinite period of active participation in teaching or supervision, subject to regulations of said Board as to attendance upon summer schools, normal schools, or colleges, or other regulations for the professional growth of the holder. (See also Normal Certificates "A.")

The general plan for granting these certificates will be as follows:

At suitable times as directed by the State Superintendent, the designated supervisor shall attend the session of the Normal School when examinations are in progress, examine the questions prepared for these examinations, the grading of any or all the papers of applicants, investigate their records in the school, and recommend the worthy ones to the State Department of Education for the certificates in question.

Provided, that any graduate of a Normal School now holding a diploma covering above conditions and holding also a first grade General Elementary license may have the license renewed for three years as a professional Normal Certificate, and thereafter indefinitely as above described and in accordance with the regulations for such renewals.

(B) A graduate of the University Summer School of this State shall be eligible for a professional Normal Certificate, the same to be granted after a plan similar to that provided above for such a certificate. This will be valid for three years in schools coming under the direction of said Board, and renewable as povided for Professional Normal Certificates.

5. PROFESSIONAL COLLEGE CERTIFICATES.

(1) College Certificates.

(A) A graduate having received a Bachelor's degree from an approved college of this State and whose course taken includes three courses in education preparatory to teaching, supervision, and adminis-

tration, these courses to be the equivalent of at least 3 hours a week each throughout a year shall be eligible for a Professional College Certificate, the same to be granted after a plan similar to that followed for Professional Normal Certificates, and to be valid for three years in any public school or system coming under the direction of said Board, and renewable thereafter for an indefinite period of active participation in teaching or supervision, subject to regulations of said Board for the professional growth of the holder.

(B) A graduate of a college as before described, except that his courses taken did not include three courses in education preparatory to teaching, supervision and administration, may, upon passing an acceptable examination upon the reading course prescribed for the renewal of Secondary Certificates, be granted a Temporary Professional Certificate valid for one year and renewable for periods of one year. This may be converted into a Professional College Certificate on completion of three such professional courses in Summer School, Normal School, or College.

Note.—Renewal examination for 1921 will be based upon the Manual of Methods, Smith's All the Children of All the People, and Rapeer's Consolidated Rural School.

(C) A graduate having obtained a Bachelor's degree from an approved college without this State may obtain a Professional College Certificate by submitting to the proper authorities a satisfactory examination upon the history and geography of the State of Georgia, provided the record shows completion of required courses in education; otherwise he may obtain a Temporary Professional Certificate by passing a satisfactory examination upon the history and geography of the State of Georgia and the reading course for renewal of College Certificates.

(2) Normal Certificates.

(A) If the courses completed by the graduate of an approved Normal School include, in addition to those prescribed under "A" of Professional Normal Certificates, two full courses of college grade of 3 hours a week throughout the year for two years in each of two subjects, the certificate granted shall be valid also for three years in high school grades of schools coming under the direction of said Board and renewable thereafter for three year periods.

(B) If the courses completed by the graduate of the University Summer School include four subjects of college grade, or acceptable courses not previously included in the high school courses of the graduate, the certificates granted shall be valid also for three years in High School grades of schools coming under the direction of said Board and renewable for three year periods.

6. For Teachers Now in Service.

(A) A teacher now engaged in the work who has received a Bachelor's degree from an approved college, and who presents satisfactory

evidence of successful teaching for three years in this State, and further satisfactory evidence of progress through attendance of at least one session upon summer school, normal school or college, may obtain a Professional College Certificate upon the same basis as provided for renewal of such certificates.

Note.—Renewal examination for 1921 will be based upon the Manual for Georgia Teachers, Smith's All the Children of All the People, and Rapeer's Consolidated Rural School.

(B) A teacher now engaged in the work who is a graduate of an approved institution of lower grade than an approved standard college, and who furnishes satisfactory evidence of successful teaching for three years and of progress through attendance upon at least one session of summer school, normal school, or college, may be granted a Professional Normal Certificate upon the basis of the renewal of such a certificate, this certificate to be valid for three years and renewable for periods of three years.

PLAN FOR TEACHER-TRAINING CLASSES IN HIGH SCHOOLS

The shortage of teachers and the inability of the normal schools and other higher institutions to supply the demand, forces upon the State Department the duty of arranging a plan for Teacher-Training in the high schools, beginning with the school year, 1920-1921.

It is a very real fact that a large per cent of the high school graduates now go into the common schools to teach—twelve out of twenty in one year in the Rome High School. Their work would be more helpful if they had received some professional training. Many states have found such Teacher-Training Courses advantageous, and a large proportion of their instructors are trained in these high school classes.

This course will give the high school itself greater influence in the community, because it meets a real need and it will have a good effect upon the entire school life of the community. As will be seen by Section 8 of "The Plan," the provisional certificate properly encourages further progress and training at Normal School or College.

The Plan.

1. High Schools desiring to qualify for such classes must make application on official blanks for recognition.

2. The high school must be a four-year school, duly accredited. Teachers of this course must be approved.

3. It must have a library (including at least thirty reference books on teaching); a laboratory; courses in home economics; and physical training must be given.

4. Provision must be made for practice teaching and observation.

5. There will be a uniform course for these classes, given during the fourth year of the High School to occupy no less than one-fifth of the time, with extra work on nine Saturdays. Pupils should be at least seventeen years of age. One unit's credit will be allowed this course towards graduation.

6. The work of these classes will be supervised by the State Department: The professional work should be taught by one of the High School teachers, but in practice teaching, the instructor should be assisted by the Principal of the elementary school.

7. The final papers in the Teacher-Training Course should be corrected by the Teacher and sent to the State Department with the final record of the pupil in all studies of the High School completed for graduation.

8. On the pupil's completing the High School and the Teacher-Training Course, the State Department will issue a provisional license

to teach in the public schools of the State, good for two years. This license may be renewed either by the completion of three courses at the State Summer School or one term's work at Normal School or College, or the regular examination upon the Reading Course. City Training School pupils, through state inspection and examination, may secure this provisional license.

THE COURSE OF STUDY FOR TEACHER-TRAINING CLASS.

Fourth Year—First Quarter: September, October, November.
Theory:

A Study of "The Science and Art of Teaching," LaRue, The American Book Company.

There should be frequent observations and tests in the school grades to illustrate the text, and the principles should be applied constantly during the second and third quarters' work.

Second Quarter: December, January, February: Practice.

Study of the State Manual, with observations and practice teaching of the various subjects with groups and whole grades.

Third Quarter: March, April, May: Review Course.

A review with intensive study of advanced Arithmetic, Grammar, Geography, and Amercian History and Civics. There should be review of the year's Teacher-Training Course in this last month. Students will be given administrative duties in supervising children; practice in making out reports, schedules, programs, lesson outlines; in presiding over meetings and assisting grade teachers.

In the second or third quarter, there should be observation and practice work, if possible, in a rural school, with the approval of the County Superintendent and teacher.

The above presents the plan for the Provisional High School Certificate: (A) High School graduation plus (or including) one unit in education.

Same credit and certification will be given for any class in approved college or for three months of approved summer course, or for term in normal school.

In addition, the Provisional College Certificate may be secured on the basis of (B) High School graduation plus two one-year standard college courses in each subject to be taught, and at least one course in education. Valid for two years and renewable on same conditions as (A) for each additional year of work accepted by a standard college toward its degree.

Note.—Work done in normal school must be of college grade. Work of a "junior college" will be accepted if the institution be a member of any college association in which the standards for membership are substantially the same as those of the Association of Colleges and Secondary Schools of the Southern States.

LIFE CERTIFICATE.

Three years' successful experience in teaching and the Master's degree from an approved University, provided it includes an approved one-year course in Education, will entitle the teacher to a Life Certificate issued under the regulations of the State Department of Education.

7. SPECIAL SUBJECT CERTIFICATES.

These certificates may be granted for three year periods to those candidates who desire to teach a special subject only, technical in character, and who have made special preparation for the work. The certificate will entitle the holder to teach or to supervise the special subject. The applicant should have scholarship the equivalent of that for graduation from approved high school, and should have training in the specialty and in science and art of teaching. The following subjects are classed as special: Domestic Science and Art, Vocal Music, Manual Training, Physical Education and Drawing, Kindergarten, Commercial Branches.

8. CERTIFICATES FROM OTHER STATES.

A teacher holding a certificate granted in another state, this certificate the equivalent of a certificate granted in the State of Georgia, may be granted the equivalent certificate, provided the teacher presents satisfactory evidence of moral character and passes a satisfactory examination upon the history and geography of the State of Georgia.

CONDITIONS GOVERNING RENEWALS.

A progressive course of reading and study shall be prescribed each year by the State Board of Education as a basis of renewal of certificates of each type or group renewable. Renewals may be obtained through an average of 75 per cent attained in the examination on the proper courses of reading and study, or through courses completed in summer school, normal school, or college, and approved by the said Board as the equivalent of reading courses by way of professional growth. As a general rule, every holder of a renewable certificate should attend at least one session of some summer school, normal school, or college, within the life-time of the certificate.

WHERE VALID.

A professional certificate issued by the State Department of Education in accordance with foregoing provisions shall be valid in any county in the State of Georgia in schools coming under direction of the State Board of Education.

CERTIFICATES FOR VOCATIONAL TEACHERS.

In Vocational Agriculture, Trade and Industrial and Home Economics Education, the certification of teachers is authorized by the State Board for Vocational Education as follows:

A. AGRICULTURE.

Graduates with the B. S. degree from the Georgia College of Agriculture, or any other institution of equal rank, who have had the prescribed professional courses, together with the practical experience required, will be granted professional certificates as teachers of vocational agriculture and home economics.

Graduates of schools of technology, or men who have had three years' special training in shop work, will be granted certificates as teachers of shop work in agricultural schools.

Teachers who have had the required amount of successful farm experience, and who are engaged in some line of farm production, will be granted special certificates as instructors of Part-time Courses in agriculture.

NEGRO.

Graduates of approved agricultural schools offering a two years' course in agriculture, or men of practical farm experience, supplemented with successful experience in teaching or Extension work, will be granted certificates as teachers of agriculture for Negro schools.

B. TRADES.

Graduates of the course of Industrial Education at Georgia School of Technology, or of any other institution of equal rank, who have had the required amount of practical trade experience, will be granted professional certificates as teachers of the trades for which they are prepared to teach.

Graduates of the Department of Industrial Education, Georgia School of Technology, or of other institution of equal rank, who have had contact with one or more trades will be granted professional certificates as teachers of related subjects.

Teachers who have had the required amount of trade experience and have completed the professional work as outlined in the State Plan, will be granted special certificates enabling them to teach their particular trade or the related subjects for the trade.

C. HOME ECONOMICS.

Graduates of the full four year Home Economics course at the State College of Agriculture or of institutions of equal rank who have had the required amount of practical experience will be granted professional certificates in Vocational Home Economics.

D. TEMPORARY VOCATIONAL CERTIFICATES.

Teachers not meeting these qualifications will be certified temporarily on the basis of success in teaching and further yearly study toward the approved four-year course.

Temporary certificates will be granted to part-time and evening class teachers who not having the required professional experience but having a large practical experience demonstrate their ability to teach successfully.

THE STANDARD RURAL COUNTY SCHOOL

TO THE COUNTY SUPERINTENDENT:

Educational results and good teaching generally are not often secured in a shiftless-looking building in which neither patrons, pupils, nor teachers take any pride. Indefiniteness has been removed at this point through the standard school. In the larger towns and cities pressure of public sentiment and the comment of visitors will sooner or later force good educational conditions—and they are improving constantly. Rural communities need to be shown and inspired by educational leaders and we have sent diplomas to more than two hundred county schools where the superintendents have certified to the fact that they have measured up to the standard in every particular. There are a number of localities in the State where the feeling is that no community in the county is able to bring its school up to these very reasonable requirements. I cannot help but think that this is a mistaken view and that some standard schools could be secured in every county in Georgia and that these would serve to inspire the others to progress. Superintendents have written that the use of this efficiency test has developed more progress in the past 12 months than for years previous in the way of improvement. The plan is of no value, however, where it is not used or applied and I earnestly hope we will have the effort at least of every superintendent in the State to have his county represented on this roll of honor. The list will be published in the next Annual Report. The standard is not unreasonably high and no more than the Georgia parent has the right to expect. Copies should be posted in every county school room in the State and can be secured for this purpose at any time on application to the State Department of Education. To be entitled to a diploma a school should measure up to the standard in the following particulars:

Report of ..... School

..... Teacher

Visited.....192....

I.

THE TEACHER.

1. Good Teaching.
2. Good Order and Management.
3. First Grade Certificate.
4. Full, Neat, and Accurate School Register.
5. Daily Program posted in Room.
6. Teacher's Manual on Desk.

II.

GROUNDS.

1. Good Condition.
2. Playgrounds.
3. School Garden.
4. Two Separate Sanitary Closets.

III.

BUILDING.

1. Painted Outside.
2. Plastered, or Ceiled and Painted.
3. No Leaks.
4. Windows without Broken Panes.
5. Proper Lighting.
6. Cloak Rooms.
7. Good Doors with Locks and Keys.
8. Clean and Well-Kept.

IV.

EQUIPMENT.

1. Patent Modern Desks.
2. At least 20 Lineal feet of Blackboard per Room.
3. Building Comfortably Heated and Ventilated.
4. Framed Pictures on the Wall.
5. Dictionary, Maps and Library.
6. Sanitary Water Supply.

V.

ASSOCIATED ACTIVITIES.

1. Corn, Canning, Pig, Poultry, Cooking Club, or Parent-Teacher Club.

VI.

SALARY OF TEACHER.

At least $60 per month.

VII.

TERM.

At least seven months.

I hereby certify that.....school, ... teacher, in charge, is up to the standard required for a certificate under each of the seven heads prescribed.

.....

Date ..... Superintendent of ..... County Schools

EDUCATIONAL TESTS (ADAPTED)

In the past, too little attention has been paid to measuring the results of teaching. It is important that the work of the schools be carefully checked up, in order that we may know how high the average of the grade is; which pupils are above and which are below, that average. It is not claimed that the Standard tests are infallible but it is claimed that pupils can be rated with more fairness and accuracy by means of tests, than by means of marks representing the judgment of one teacher.

In making use of tests, the observer should have the following points well in mind:

A. What classes in the various grades SHOULD BE ABLE TO DO, and how to obtain from Standardized Tests the Standard to which the AVERAGE pupils of a certain grade ought to measure up.

B. To use the Tests properly, that is, to be able to test a certain class and ascertain whether its average is equal to, below, or above the Standard.

In this connection, it should be said that the most important products of education may be grouped under the head of ATTITUDES, and tests do not, of course, measure these products, the products themselves being intangible in nature. Tests as yet can measure only the mechanical aspects.

Many things enter into the making of a single test, and for that reason too much importance should not be placed on data which is the result of one test. No final conclusion as to the standard of the class or to that of an individual member can be drawn from such a source alone.

Among other factors that affect the result of a test are these:

(1) The person giving the test (stranger or regular teacher), the type of person (quiet, effective, etc., or otherwise).
(2) "Atmosphere" of the room (tense or calm).
(3) Presence of others in the room (the superintendent, visitors).
(4) Whether children know they are being tested.
(5) Time of giving test (near beginning of day, or near end).
(6) Condition of child (unwell, tired, hungry, physically defective).
(7) Weather (humidity, heat, barometric pressure, dismal day or bright).
(8) Room (lighting, heating, ventilation).
(9) Home conditions (worry, sorrow).
(10) Food (Sufficient, suitable).
(11) Dissipation (conscious or unconscious).
(12) Social conditions of life outside of school.

(13) Attitude toward work (indifferent, interested).
(14) Disturbances diverting attention from work in hand.

Notes should be taken on the above, so that in considering the results of the test, the factors named may be given whatever weight is due them. Unless this is done, it will hardly do to use the results of the test in formulating a policy of dealing with one child or with a group of children. Tests are seldom made under ideal conditions.

The observers and demonstrator, working under the teacher-trainer, must study the tests until they can state what ANY CLASS for which the test is intended *should be able to do,* in TERMS OF THE TEST.

In ordering tests, ask for directions for scoring and tentative standards. The standards are often given on the same sheet with the test, but sometimes they will be found on a separate sheet. For this purpose the following tests are much used:

(a) *Standardized Reading Tests*:
(1) Gray's Oral Reading Test. W. S. Gray, University of Chicago, Chicago, Ill.
(2) Fordyce's Silent Reading Scale. University Pub. Co., Lincoln, Nebraska.
(3) Kansas Silent Reading Test. Kansas State Normal School, Emporia, Kans.
(5) Monroe's Silent Reading Tests. Public School Pub. Co., Bloomington, Ill.
(6) Thorndike's Visual Vocabulary Scale. Bureau of Publications, Teachers College, Columbia University, New York City.
(b) *Standardized Arithmetic Tests.*
(1) Courtis's Standard Research Tests in Arithmetic, Series B. S. A. Courtis, 82 Eliot Street, Detroit, Michigan.
(2) Woody's Arithmetic Test (Series A).
(3) Monroe's Standardized Reasoning Test and Monroe's Diagnostic Tests. W. S. Monroe, University of Illinois, Urbana, Ill.
(4) Cleveland Survey Arithmetic Tests, Pub. School Pub. Co., Bloomington, Ill.
(c) *Standardized History Scales*—
(1) Hahn's History Scales. H. H. Hahn, Wayne State Normal School, Wayne, Nebraska.
(2) Harlan's Test of Information in American History. Bureau of Cooperative Research, University of Minnesota, Minneapolis, Minn.
(d) *Standardized Writing Scales*—
(1) Ayres' Writing Scale (Gettysburg Edition). Russell Sage Foundation, New York City.
(2) Thorndike's Writing Scale. Bureau of Publications, Teachers College, Columbia University, New York City.
(3) Palmer Standards (Grades 1 to 8). The A. N. Palmer Company, Palmer Building, Cedar Rapids, Iowa.
(e) *Standardized Geography Scales.*

(1) The Hahn-Lackey Geography Scale (Grades 4 to 8). Hahn-Lackey, Wayne State Normal, Wayne, Nebraska.
(2) Courtis's Standard Tests in Geography for States and Important Cities of the U. S. S. A. Courtis, 82 Eliot St., Detroit, Mich.

(f) *Standardized Spelling Scales.*

(1) Ayres' Spelling Scale. Russell Sage Foundation, New York City.
(2) Monroe's Time-Sentence Spelling Test. W. S. Monroe, University of Illinois, Urbana, Ill.

(g) *Standardized Composition Scales—*

(1) The Willing Composition Scale. Bureau of Educational Research, University of Illinois, Urbana, Ill.
(2) Starch's Punctuation Scale. Daniel Starch, University of Wisconsin, Madison, Wis.
(3) Charters' Diagnostic Test in Language and Grammar. Bureau of Educational Research, University of Illinois, Urbana, Ill.
(4) Hillegas' Composition Scale (Nassau Edition). Teachers College, Columbia University, New York City.

SCHOOL LIBRARIES

DR. JOS. S. STEWART.

Who will see to it that all our Georgia schools are supplied with books?

Since the last Manual was written, 500 libraries have been added to the schools and 100,000 books purchased. This is good. There are still however, many white and colored schools without books. 1970 white elementary schools and 129 colored schools now have their libraries. Do the school people get the meaning of this?

It is idle to argue the value of a library to the school and community. This surely needs no argument now—certainly not in a teachers manual. The question concerning us is, how shall the 11,751 elementary schools be supplied with library books?

I. In the first place, county Boards of Education must be brought to realize that the rural school library is as much a part of the school equipment as desks black-boards, stoves and text books.

No school should be called a standard school that does not have a dictionary, maps, and a library. This is the highest official authority for the county board. No high school can get any credit or receive any special State aid without a well equipped library.

II. Over 38 states in the Union are appropriating funds every year for rural school libraries. Georgia can not solve the problem without such aid from the school funds. Beginning with January, 1921, every county is required to levy a school tax. Let the county board, from the very beginning, set aside from one to two per cent of this county local tax for library purposes. The county board, in fixing the school budget should set this fund aside for disbursement during the year as indicated later. This county library fund each year will be the nucleus for library expenditures. Without this county aid, the county will fail to organize the rural school libraries. This is fundamental.

III. The county School Superintendent should appoint at the beginning of the year, a teachers committee of five on libraries to act with him in library matters. This committee should report once a month to the county teachers and to the public through the county papers. The committee should acquaint the public with the present status of library development, plans for improvement and all actual progress made by any school or by the county as a whole.

Probably in most counties at present, the activities of the committee will be three fold:

(a) The establishment or enlargement of libraries in the larger counties and better constructed school houses.

(b) The selection and distribution of books for the smaller white schools, usually called traveling libraries.

(c) Similar libraries for the colored schools.

IV. Part of the county school library fund should be set aside for traveling libraries as indicated above and part as aid for local school libraries. The county funds should be matched, dollar for dollar, by private contributions. The white people should contribute for white schools and the colored people for those of their schools. People can be educated to contribute to school libraries as easily as to "remote causes." The trouble is, that the teachers do not put the proposition clearly before them. Why should not gifts to the school library for use of all the children appeal to citizens? No aid should be given from county funds to a local school library that is not matched or doubled by the local school.

Regulations should be drafted safe guarding the books when bought and providing for careful selection of the books from approved lists.

One of the difficulties of rural work is the transportation of books to and from the library. The Fitzgerald Public Library has adopted a parcel post system.

The traveling library books are put in canvas bags, made to accommodate 15 or 20 books and sent to the schools and returned by parcel post, or boxes are made and the books packed and retained in these at the school. In this case they are distributed by other means than parcel post. Begin distribution, if with only a small number of libraries and enlarge as the demand and funds increase until there will be enough to keep one at every small school all the time. The Junior High School centers should in every case be the local library centers and in many cases, books might be distributed to the five or six related, one and two teacher schools from these centers.

The location of the traveling libraries may be in the County Superintendent's office or in the library of the County High School. The school librarian attending to the distribution of the sets in the latter case, the Superintendent in the former case. In a few counties the county library might serve as a distributing center. The plan of sub-centers at the Junior H. S. might also be considered.

The local school library should be provided with good book cases, which can be made by the boys or by a local carpenter. These should be in a room that can be locked or the cases should be locked. The library committee can make rules governing the loaning of books. These rules should be adopted by the county board as the board is a partner in the library and must see that the public funds are not wasted. The books are to be used, at the same time the public is to be protected and the pupils taught to take care of the books, even if fines are necessary. A strict inventory should be made at the beginning and end of each school year and those responsible for the library held accountable. The care of

the library is an administrative one. Where the school house is not safe, a nearby home could be used to keep the traveling sets.

V. Book lists and prices can be secured from the State Library Commission, State Capitol, or from Mrs. Wilbur Colvin, Atlanta, Ga., who has been chosen to supply library books or from the admirable suggestions under each chapter in this manual. Those desiring an outline for speeches and papers on the library are referred to the old manual, pages 233-238.

VI. Before proceeding to establish a county system of school libraries it will be well to correspond with the State Library Commission, of which Miss Charlotte Templeton, is Secretary. Through such correspondence cooperation with the local library, if one exists, may be had and much valuable information may be gained.

The State Library Commission began active operation in January, 1920, and should mean much to the library and educational interests of the state. A secretary is employed who will gladly give expert advice in all library matters,—such as the selection of books, system of records, care of books, etc. The Commission is new and its collection of books will, of necessity, grow slowly, but it is preparing to supply individual borrowers with books along special lines as well as to send out small libraries to schools which have no libraries of their own nor access to any public library. If the Commission can serve you along the lines indicated, do not hesitate to ask its help and it will meet your wishes as far as its resources will allow.

VII. By systematic organization, county and local aid, wise publicity, and constant use by pupils, teachers and patrons, the school authorities can provide the sense that Franklin spoke of to the 11,751 elementary schools now demanding help and can brighten, quicken and make happier, hundreds of thousands of children.

Joseph of old stored up grain in times of plenty for the lean years, and saved the nation. May not all resolve that we will give to the youth of Georgia the riches stored in library books in the schools of the state? Who doubts that many leaders will come from these to bless the state?

The National Education Association speaks as follows about:

LIBRARIES IN EDUCATION.

1. All pupils in both elementary and secondary schools should have ready access to books to the end that they may be trained:

(a) to love to read that which is worth while

(b) to supplement their school studies by the use of books other than textbooks

(c) to use reference books easily and effectively

(d) to use intelligently both the school library and the public library.

THE TEACHERS' LIBRARY

(with a questionnaire or a personal survey for each teacher.)

1. Check with the letter A in the following list the name of each book in your own library.

2. Check with the letter B the name of each book you have read during the last five years.

3. Check with the letter C the name of each book easily accessible to you in your school or teachers' library.

4. Check with the letter X the name of each book you think desirable and practicable to have put in your teachers' library this year.

5. Consult with your superintendent and co-workers for the purpose of enlarging or organizing a teachers' library.

6. Is your heart in your work?

   Are you familiar with the latest books in your line of work? The good teacher is a *growing* teacher, sometimes learning more in service, by experience and by studying books, than some others learn at college or summer school.

7. Every teacher, however broad his work may be, should specialize on some particular line of work; it may be grade work or high school work or departmental work. The teacher can advance most rapidly when he begins to concentrate his attention toward the mastery of some definite line of work.

   What is your specialty?

   How many books have you on this subject in your personal library? Do you know how to find the books you need in your work and in your specialty?

8. Are you growing in skill and power and reputation as a teacher?

   Can you afford to neglect the wonderful help and inspiration you can gain from teachers' periodicals and books?

9. Order a new magazine or book now and exchange with some of your co-workers. Ask them to join you in this co-operative effort for your mutual good.

   Every teacher ought to read a new book every month. Are you doing so? You owe it to the children, to your school, to the tax payers, to yourself.

10. Do not lose this list of books. I hope it will be suggestive and helpful to my fellow teachers in Georgia. I believe the most effective way to improve our educational work is to encourage more love for reading and a *more skillful and a greater use of books in school and out of school.*

    Let us have better schools by the better use of better books by teachers and pupils.

THE TEACHERS' LIBRARY

A List Suggested by M. M. PARKS, State School Superintendent, Atlanta, Ga.

PERIODICALS FOR ELEMENTARY TEACHERS

Normal Instructor and Primary Plans	Owen Pub. Co., Danville, N. Y.
Primary Education	Educational Publishing Co., Boston, Mass.
Progressive Teacher	Morristown, Tenn.
Kindergarten and First Grade	Milton Bradley Co., Atlanta, Ga.
School Arts Magazine	The Davis Press, 25 Foster St., Worcester, Mass.
The Elementary School Journal	University of Chicago Press, Chicago.
Journal of Educational Method	World Book Co., Yonkers, N. Y.

PERIODICALS FOR HIGH SCHOOL TEACHERS.

The High School Quarterly	Athens, Georgia.
The School Review	University of Chicago Press, Chicago.
The English Journal	University of Chicago Press, Chicago.
Industrial Arts Magazine	Bruce Pub. Co., Milwaukee, Wis.
School Science and Mathematics	Smith & Turton, Publishers, Mount Morris, Ill.
General Science Quarterly	W. G. Whitman, Salem, Mass.

PERIODICALS—MISCELLANEOUS.

The School and Home	Atlanta, Georgia.
The School Board Journal	Bruce Pub. Co., Milwaukee, Wis.
The Journal of Education	Boston, Mass.
Teachers College Record	Columbia University, N. Y. City.
The Educational Review	Doubleday, Page & Co., New York City.
School and Society	Swarthmore, Pennsylvania.

PERIODICALS—MISCELLANEOUS—Continued

Journal of National Education Association	Washington, D. C.
National Geographic Magazine	Washington, D. C.
Publications of the Bureau of Education	Washington, D. C.
Educational Administration and Supervision	Warwick & York, Baltimore, Md.
Journal of Rural Education	Teachers' College, N. Y.

BOOKS FOR PRIMARY TEACHERS.

Parker	General Methods of Teaching in the Elementary Schools	Ginn & Co., Atlanta, Ga.
Meriam	Child Life and the curriculum	World Book Co., Yonkers, N. Y.
Watkins	How to Teach Silent Reading to Beginners	Lippincott Co., Atlanta, Ga.
Krackowizer	Projects in the Primary Grades	Lippincott Co., Atlanta, Ga.
Cook	The Play Way	Stokes
Haliburton & Smith	Teaching Poetry in the Grades	Houghton Mifflin Co., New York.
	Illinois Course of Study (30c)	Dept. of Education, Springfield, Ill.
	Washington Course of Study	Dept. of Education, State of Washington.
	Baltimore County Course of Study	Warwick & York, Baltimore, Md.
Gessell	The Normal Child in Primary Education	Ginn & Co., Atlanta, Ga.
Wells	A Project Curriculum	Lippincott Co., Atlanta, Ga.

BOOKS FOR ELEMENTARY TEACHERS.

	Georgia Manual for Teachers	(See County Superintendent)
Grant	Acquiring Skill in Teaching	Silver, Burdett & Co., N. Y. City.
Pittman	Successful Teaching in Rural Schools	American Book Co., Atlanta, Ga.
Rapeer	How to Teach Elementary School Subjects	Scribners, Atlanta, Ga.
Strayer & Norsworthy	How to Teach	Macmillan Co., Atlanta, Ga.
Kendall & Myrick	The Teaching of Fundamental Subjects	Houghton-Mifflin Co., N. Y. City.
Bonser	The Elementary School Curriculum	Macmillan Co., Atlanta, Ga.

BOOKS FOR ELEMENTARY TEACHERS—Continued.

Charters	Teaching the Common Branches	Houghton-Mifflin Co., N. Y. City.
McMurry	How to Study	Houghton-Mifflin Co., N. Y. City.
Wray	Jean Mitchell's School	Public School Pub. Co., Bloomington, Ill.
	Baltimore County Course of Study	Baltimore, Md.
McMurry	Teaching by Projects	Macmillan Co., Atlanta, Ga.
Meriam	Child Life and Curriculum	World Book Co., Yonkers, N. Y.
McMurry	Handbook of Practice for Teachers	Macmillan Co., Atlanta, Ga.
Parker	History of Modern Elementary Education	Ginn & Co., Atlanta, Ga.
Earhart	Types of Teaching	Houghton-Mifflin Co., N. Y. City.
Strayer & Englehardt	The Classroom Teacher	American Book Co., Atlanta, Ga.
Smith	All the Children of All of People	Macmillan Co., Atlanta, Ga.
O'Shea	Everyday Problems in Teaching	Bobbs, Merrill Co., Indianapolis, Ind.
Hall & Hall	The Question as a Factor in Teaching	Macmillan Co., Atlanta, Ga.
McMurry	Elementary School Standards	World Book Co., Yonkers, N. Y.
Whipple	How to Study Effectively	Public School Pub. Co., Bloomington, Ill.
LaRue	Science and Art of Teaching	American Book Co., Atlanta, Ga.
Sears	Classroom Organization and Classroom Control	Houghton-Mifflin Co., N. Y. City.
Maxwell	Observation of Teaching	Houghton-Mifflin Co., N. Y. City.
Dynes	Socializing the Child	Silver, Burdett Co., N. Y. City.
Turner	The Essentials of Good Teaching	D. C. Heath Co., Atlanta, Ga.
Davis	The Technique of Teaching	Macmillan Co., Atlanta, Ga.
Robbins	The Socialized Recitation	Allyn, Bacon Co., Atlanta, Ga.
Freeland	Modern Elementary School Practice	Macmillan Co., Atlanta, Ga.
	Graded List of Books for Children	American Library Association, Washington, D. C.
Thomas	Training for Effective Study	Houghton-Mifflin Co., N. Y. City.
Stoner	Natural Education	Bobbs, Merrill Co., Indianapolis, Ind.
Burle	School in the Home	
Keller	Life of Helen Keller	

BOOKS FOR HIGH SCHOOL TEACHERS.

Parker	Methods of Teaching in High Schools	Ginn & Co., Atlanta, Ga.
Johnston	The Modern High School	Scribners, Atlanta, Ga.
Hollister	High School Administration	D. C. Heath Co., Atlanta, Ga.
Colvin	An introduction to High School Teaching	Macmillan Co., Atlanta, Ga.
Inglis	Principles of Secondary Education	Houghton-Mifflin Co., N. Y. City.
Judd	Psychology of High School Subjects	Ginn & Co., Atlanta, Ga.
Bennett	School Efficiency	Ginn & Co., Atlanta, Ga.
Foster	Principles of Teaching in Secondary Education	Scribners, Atlanta, Ga.
Monroe	Principles of Secondary Education	Macmillan Co., Atlanta, Ga.
Bagley	Classroom Management	Macmillan Co., Atlanta, Ga.
Pringle	Adolescence and High School Problems	D. C. Heath Co., Atlanta, Ga.
Lewis	Democracy's High School	Houghton-Mifflin Co., N. Y. City.
Stout	The High School	D. C. Heath Co., Atlanta, Ga.
Clark	The High School Boy	Macmillan Co., Atlanta, Ga.
Johnston and others	High School Education	Scribners, Atlanta, Ga.
Sneldon	Problems of Secondary Education	Houghton-Mifflin Co., N. Y. City.
Van DenBurg	Junior High School Idea	Henry Holt & Co., N. Y. City.
Briggs	Junior High School	Houghton-Mifflin Co., N. Y. City.
Bennett and Bristol	The Teaching of Latin and Greek	Longmans, Green & Co., N. Y.

BOOKS—MISCELLANEOUS.

Bobbitt	The Curriculum	Houghton-Mifflin Co., N. Y. City.
McFee	The Teacher, the School and the Community	American Book Co., Atlanta, Ga.
Wilson	The Motivation of School Work	Houghton-Mifflin Co., N. Y. City.
Dewey	Democracy and Education	Macmillan Co., Atlanta, Ga.
Dewey	The School of Tomorrow	Dutton & Co., New York.
Dewey	The School and Society	University of Chicago Press, Chicago, Ill.
Kilpatrick	The Project Method (A Pamphlet)	Teachers College, Columbia University, N. Y.

BOOKS—MISCELLANEOUS—Continued

Thomas	Training for Effective Service	Houghton-Mifflin Co., Boston, Mass.
Robbins	The School as a Social Institution	Allyn, Bacon & Co., Atlanta, Ga.
James	Talks to Teachers	Henry Holt & Co., N. Y. City.
Palmer	The Ideal Teacher	Houghton-Mifflin Co., N. Y. City.
Thorndike	Education	Macmillan Co., Atlanta, Ga.
Sharp	Education for Character	Bobbs, Merrill Co., Indianapolis, Ind.
Spencer	Education	D. Appleton, N. Y. City.
Graves	Great Educators for Three Centuries	Macmillan Co., Atlanta, Ga.
Palmer	The Folly of Nations	Houghton-Mifflin Co., N. Y. City.
Dinsmore	The Training of Children	American Book Co., Atlanta, Ga.
Colgrove	The Teacher and the School	Scribners, Atlanta, Ga.
Bagley	The Educative Process	Macmillan Co., Atlanta, Ga.
Woodrow	Brightness and Dullness in Children	Lippincott Co., Atlanta, Ga.
Kitson	How to Use Your Mind	Lippincott Co., Atlanta, Ga.
Colvin	The Learning Process	Merriam Co., Springfield, Mass.
Freeman	How Children Learn	D. C. Heath Co., Atlanta, Ga.
Dewey	How We Think	D. C. Heath Co., Atlanta, Ga.
Sandwick	How to Study and What to Study	D. C. Heath Co., Atlanta, Ga.
Betts	The Recitation	Houghton-Mifflin Co., Boston, Mass.
Charters	Methods of Teaching	Houghton-Mifflin Co., Boston, Mass.
Cubberley	Changing Conceptions of Education	Houghton-Mifflin Co., Boston, Mass.
Gilbert	What Children Study and Why	Silver, Burdett Co., New York.
Horne	Philosophy of Education	Houghton-Mifflin Co., Boston, Mass.

SPELLING.

Tidgman	The Teaching of Spelling	World Book Co., Yonkers, N. Y.
Pryor & Pittman	A Guide to the Teaching of Spelling	Macmillan Co., Atlanta, Ga.
Horn	Spelling—Tenth-Year Book, Part II	Public School Pub. Co., Bloomington, Ill.

SPELLING—Continued

Cook & O'Shea	The Child and His Spelling	Bobbs, Merrill Co., Indianapolis, Ind.
Hawley & Gallup	Method of Teaching Spelling, in Journal of Educational Research, April, 1922	

READING.

Parker	How to Teach Reading (40c)	University of Chicago Press, Chicago, Ill.
Klapper	The Teaching of Reading	D. Appleton, N. Y. City.
	The Twentieth-Year Book, Part II	Public School Pub. Co., Bloomington, Ill.
	The Sixteenth-Year Book, Part I	
	The Eighteenth-Year Book, Part II	
Burgess	Measurement of Silent Reading	Russell Sage Foundation, N. Y. City.
Jenkins	Reading in the Primary Grades	Houghton-Mifflin Co., N. Y. City.
Briggs & Coffman	Reading in Public Schools	Row, Peterson & Co., N. Y. City.
Stone	Oral and Silent Reading	Houghton-Mifflin Co., N. Y. City.
Leonard	Essential Principles of Teaching Reading and Literature	Lippincott Co., Atlanta, Ga.
Huey	The Psychology and Pedagogy of Reading	Macmillan Co., Atlanta, Ga.
Judd	Reading—Its Nature and Development	University of Chicago Press, Chicago, Ill.
O'Brien	Silent Reading	Macmillan Co., Atlanta, Ga.
Sawyer	Five Messages to Teachers of Primary Reading	Rand-McNally Co., N. Y. City.
Kerfoot	How to Read	Houghton-Mifflin Co., N. Y. City.
Arnold	Learning to Read	Silver, Burdett & Co., N. Y. City.
Gray	Deficiencies in School Reading	University of Chicago Press, Chicago, Ill.
Gray	Deficiencies in Reading Ability	D. C. Heath Co., Atlanta, Ga.

STORIES—PRIMARY.

Bryant	How to Tell Stories to Children	Houghton-Mifflin Co., N. Y. City.
Harris	Uncle Remus—His Songs and Sayings	D. Appleton Co., N. Y. City.

STORIES—PRIMARY—Continued

Grimm's	Fairy Tales	F. Warne.
Brown	In the Days of Giants	Houghton-Mifflin Co., N. Y. City.
Jacobs	Aesop's Fables	Macmillan Co., Atlanta, Ga.
Hawthorne	The Wonder Book	Houghton-Mifflin Co., N. Y. City.
Bailey	Stories Children Need	Milton Bradley Co., Atlanta, Ga.
Mabie	Fairy Tales Every Child Should Know	Doubleday, Page & Co., N. Y. City.
	Myths Every Child Should Know	Doubleday, Page & Co., N. Y. City.
	Legends Every Child Should Know	Doubleday, Page & Co., N. Y. City.
Cather	Education by Storytelling	World Book Co., Yonkers, N. Y.
Shedlock	Art of the Storyteller	D. Appleton Co., N. Y. City.
Bryant	Best Stories to Tell to Children	Houghton-Mifflin Co., N. Y. City.
Olcott	Good Stories for Great Holidays	Putnam's Sons, New York.
Dickinson & Skinner	Children's Books of Christmas Stories	Houghton-Mifflin Co., Boston, Mass.
Skinner	Little Dramas for Primary Grades	American Book Co., Atlanta, Ga.
Lovett	Grandmother Stories from the Land of Used-To-Be	Columbian Book Co., Atlanta, Ga.
	Graded List of Stories for First and Second Grades (10c)	National Kindergarten Assn., New York City.
Baldwin	Old Greek Stories	American Book Co., Atlanta, Ga.
Kipling	Just-So Stories	Doubleday, Page & Co., N. Y. City.
Anderson	Fairy Tales	Rand-McNally Co., N. Y. City.
Williams	Choice Literature Book	American Book Co., Atlanta, Ga.
Alden	Why the Chimes Rang	
Eggleston	Stories of Great Americans for Little Americans	American Book Co., Atlanta, Ga.
Scudder	Book of Folk Stories	Houghton-Mifflin Co., N. Y. City.
Lindsay	Mother Stories	Milton Bradley Co., Atlanta, Ga.
Baker	Stories of Old Greece and Rome	Macmillan Co., Atlanta, Ga.
L. S. Houghton	Telling Bible Stories	
Peabody	Old Greek Stories Told Anew	
Cook	Nature Myths and Stories	
Curry & Clippinger	Children's Literature	Rand, McNally Co., N. Y. City.

VERSE FOR PRIMARY TEACHERS.

Field	Poems of Childhood	
Lucas	Book of Verse for Children	Henry Holt & Co., N. Y. City.
Stevenson	Child's Garden of Verse	Educational Publishing Co., Boston, Mass.
Sherman	Little Folk Lyrics of Joy	Houghton-Mifflin Co., N. Y. City.
Rossetti	Sing Song	Macmillan Co., Atlanta, Ga.
	The Real Mother Goose	Rand, McNally Co., N. Y. City.
Haliburton & Smith	Teaching Poetry in the Grades	Houghton-Mifflin Co., N. Y. City.
McClintock	Literature in the Elementary Grades	D. C. Heath Co., Atlanta, Ga.
Sheridan	The Writing and Speaking of English	Sanborn Co., New York City.
Baker & Thorndike	Everyday English	Macmillan Co., Atlanta, Ga.

ENGLISH.

Bolenius	The Teaching of Literature in the Grammar Grades and High School	Houghton-Mifflin Co., N. Y. City.
Bulletin 1917	Reorganization of English in Secondary Schools	U. S. Bureau of Education, Washington, D. C.
Haliburton & Smith	The Teaching of Poetry in the Elementary Schools	Houghton-Mifflin Co., N. Y. City.
Klapper	The Teaching of English	Longmans.
Thomas	Teaching English in the Secondary Schools	Houghton-Mifflin Co., N. Y. City.
Fairchild	The Teaching of Poetry in High School	Houghton-Mifflin Co., N. Y. City.
Myra King	Language Games	
Barnes	English in the Country Schools	Row, Peterson & Co., N. Y. City.
Carpenter, Baker & Scott	The Teaching of English	Longmans, Green & Co., N. Y. City.
Sheridan	Speaking and Writing English	Sanborn Co., N. Y. City.
Bulletin 41	Books for High Schools	U. S. Bureau of Education, Washington, D. C.
J. Rose Colby	Literature and Life in the School	
Trent, Hansen & Brewster	The English Classics	

ENGLISH—Continued.

Bates	Talks on the Study of Literature	Houghton-Mifflin Co., N. Y. City.
Bates	Talks on Teaching Literature	Houghton-Mifflin Co., N. Y. City.
Jones	Sources of Interest in High School English	American Book Co., Atlanta, Ga.
Bennett	Literary Taste—How to Form It	Doran Co.
Chubb	The Teaching of English	Macmillan Co., Atlanta, Ga.
Miller	Dramatization of Bible Stories	University of Chicago Press, Chicago, Ill.
Goldwasser	Methods in English	D. C. Heath Co., Atlanta, Ga.
Leonard	Essential Principles of Teaching Reading and Literature	Lippincott Co., Atlanta, Ga.
Leonard	English Composition as a Social Problem	Houghton-Mifflin Co., N. Y. City.
Campagnac	Teaching Composition	Houghton-Mifflin Co., N. Y. City.
Ward	What is English?	
Simons	English Problems in the Solving	Scott.
	Wisconsin Reading Circle Annual	State Reading Circle Board.
	Special Days and Their Observance	State Dept. of Education, (Sept. 1919), Trenton, N. J.
Greensugh & Kittredge.	Words and Their Ways in English Speech	
Barbour	The History and Method of Teaching English Grammar	
Herrick	Methods of Teaching Rhetoric	
L. D. Mackay	Costumes and Scenery for Amateurs	Holt.
B. H. Clark	How to Produce Amateur Plays	
Orr	Dramatization	Scott.
Woodberry	The Appreciation of Literature	Harcourt, Brace & Co., New York.
Heydrick	How to Study Literature	Hinds, Heyman & Ethridge.
Moulton	Modern Study of Literature	University of Chicago Press, Chicago, Ill.
Matthews	The Short Story	American Book Co., Atlanta, Ga.
Pitkin	The Art and Business of the Short Story	
Woodbridge	The Drama—Its Law and Technique	Allyn-Bacon Co., Atlanta, Ga.

ARITHMETIC.

Brown & Coffman	How to Teach Arithmetic	Row, Peterson & Co., N. Y. City.
Klapper	Teaching of Arithmetic	D. Appleton & Co., N. Y. City.
Overman	Principles and Methods of Teaching Arithmetic	Lyons & Carnahan.
Thorndike	New Methods in Arithmetic	Rand-McNally Co., N. Y. City.
McMurry	Special Methods in Arithmetic	Macmillan Co., Atlanta, Ga.
Lindquist	Modern Arithmetic Methods and Problems	Scott, Forsman & Co.
McLellan & Dewey	Psychology of Numbers	D. Appleton & Co., N. Y. City.
Harris & Waldo	First Journeys in Numberland	Scott, Forsman & Co.
Stamper	A Textbook on the Teaching of Arithmetic	American Book Co., Atlanta, Ga.
Walsh	Practical Methods in Arithmetic	D. C. Heath & Co., Atlanta, Ga.
Stone	The Teaching of Arithmetic	Sanborn.
Drouchel, Withers & Noonan	Arithmetic Essentials, Book I	
Thorndike	Arithmetic, Book I	Rand-McNally Co., N. Y. City.
Waldo	Number Games	Scribners Sons, Atlanta, Ga.
Smith	The Teaching of Arithmetic—The Work of the First Year	Scribners Sons, Atlanta, Ga.
Suzzalo	The Teaching of Primary Arithmetic	Houghton-Mifflin Co., N. Y. City.
Hoyt & Peet	Everyday Arithmetic	Houghton-Mifflin Co., N. Y. City.
Howell	Psychology and Pedagogy of Arithmetic	

GEOGRAPHY.

Dodge & Kirchevey	The Teaching of Geography	Rand-McNally Co., N. Y. City.
Smith	Teaching Geography by Problems	Doubleday, Page & Co., N. Y. City.
Carpenter	Geographical Readers	American Book Co., Atlanta, Ga.
Chamberlain	The Continents and Their People	Macmillan Co., Atlanta, Ga.
McMurry	Larger Type Studies in American Geography	Macmillan Co., Atlanta, Ga.
McMurry	Special Methods in Geography	Macmillan Co., Atlanta, Ga.

GEOGRAPHY—Continued

Sutherland	Teaching of Geography	Scott, Forsman & Co.
Branam	Teaching of Geography (1921)	Ginn & Co., Atlanta, Ga.
Holtz	Principles and Methods of Teaching Geography (1919)	Macmillan Co., Atlanta, Ga.
Adams	Practical Methods of Teaching Elementary Geography	Hinds, Heyden & Ethridge.
	The Teaching of Geography	Scott, Forsman & Co.
King	Methods and Aids in Geography	Lee & Shepard.
King	The Picturesque Geographical Readers	Lee & Shepard.
Sutherland & Sanford	Practical Exercises in Geography	Silver, Burdett & Co., N. Y. City.
Atwood & Thomas	Teaching the New Geography	Ginn & Co., Atlanta, Ga.
Branam	The Teaching of Geography	Ginn & Co., Atlanta, Ga.

HISTORY.

Rice and others	The Course of Study in History for the Common Schools	University of Chicago Press, Chicago, Ill.
Johnson	The Teaching of History	Houghton-Mifflin Co., N. Y. City.
Committee of Eight	The Study of History in the Elementary Schools	Scribners, Atlanta, Ga.
McMurry	Special Methods in History	Macmillan Co., Atlanta, Ga.
Bagley	Universal Essentials in History, 14th and 16th Year Book, Part I	Public School Pub. Co., Bloomington, Illinois.
Sparks	Expansion of the American People	Scott, Forsman Co., N. Y. City.
Tryon	Teaching of History in Junior and Senior High Schools	Ginn & Co., Atlanta, Ga.
Sampson	Supervised Study in History	Macmillan Co., Atlanta, Ga.
Kendall & Stryker	History in Elementary School	Houghton-Mifflin Co., N. Y. City.
	Practical Map Exercises in Geography and History.	Ginn & Co., Atlanta, Ga.

HISTORY—Continued

Wayland	How to Teach History (American)	Macmillan Co., Atlanta, Ga.
Hart	Source Readers	Macmillan Co., Atlanta, Ga.
	Aids in Teaching and Study of History and Geography	McKinley Pub. Co.
Miller	History in Song and Story	Educational Pub. Co., Boston, Mass.
Berd	A Student's Guide in American History	Iroquois Pub. Co.
	The Historical Outlook ($2.00 a year)	A. E. McKinley, Philadelphia, Pa.
	The Report of the Committee of Seven in the Teaching of History	

CIVICS AND CITIZENSHIP.

Dunn & Harris	Citizenship in School and Out (For Elementary Grades)	D. C. Heath & Co., Atlanta, Ga.
Hill	Teaching of Civics	Houghton-Mifflin Co., N. Y. City.
Dunn	The Community and the Citizen (For Junior High School)	D. C. Heath & Co., Atlanta, Ga.
Allen	Civics and Health	Ginn & Co., Atlanta, Ga.
Adams	The Spirit of Youth and the City Streets	Macmillan Co., Atlanta, Ga.
Bok	A Dutch Boy Fifty Years After	Scribners, Atlanta, Ga.
Bulletins	U. S. Bureau of Education—	
	No. 12, 1913, Promotion of Peace	
	No. 47, 1913, Civic Materials in Government Publications	
	No. 17, 1915, Civic Education in Elementary Schools	
	No. 23, 1915, The Teaching of Community Civics	
Doughton	Preparing for the World's Work	Scribners, Atlanta, Ga.
Parsons	The Land of Fair Play	Scribners, Atlanta, Ga.

CIVICS AND CITJZENSHIP—Continued.

Adams	A Community Civics	Scribners, Atlanta, Ga.
Allen	Universal Training for Citizenship and Public Service	Macmillan Co., Atlanta, Ga.
Boutwell	The Constitution of the United States	D. C. Heath & Co., Atlanta, Ga.
Norton	The Constitution of the United States	Little, Brown Co.
Crown	The Constitution and What It Means Today	Princeton University, Princeton, New Jersey.
Jenks	Citizenship and the Schools	Henry Holt & Co., N. Y. City.
Smith	Training for Citizenship	Little, Brown & Co.
Tarkington	My Country	Ginn & Co., Atlanta, Ga.
Richmond & Wallace	Good Citizenship	American Book Co., Atlanta, Ga.
Hill	Community Life and Civic Problems	Ginn & Co., Atlanta, Ga.
Monroe & Miller	The Spirit of Democracy	World Book Co., Yonkers, N. Y.
McBrien	America First	American Book Co., Atlanta, Ga.
Ashley	The New Civics	Macmillan Co., Atlanta, Ga.
Cabbott	A Course in Citizenship and Patriotism	Houghton-Mifflin Co., N. Y. City.
Bogarduo	Americanization	University of California Press, Berkeley, Cal.
Reed	Form and Function of American Government	World Book Co., Yonkers, N. Y.
Dole	Economics for Upper Grades	D. C. Heath & Co., Atlanta, Ga.
Hoxie	How the People Rule (Lower Grades)	Silver, Burdette & Co., N. Y. City.
	Course of Study in Citizenship (25c)	Dept. of Public Instruction, Trenton, N. J.
	Course of Study in Citizenship	Board of Public Education, Indianapolis, Ind.
	Course of Study in Citizenship (For Junior High Schools—35c)	Board of Pub. Education, Rochester, N. Y.
	Syllabus for Elementary Schools: Civics and Patriotism (1920)	University of State of New York, New York City.
Bulletin	America, Americanism, Americanization	Dept. of Education, Washington, D. C.
	The Teaching of Government	Macmillan Co., Atlanta, Ga.
Skinner	The Teaching of Citizenship	Historical Outlook, June, 1919.

CIVICS AND CITIZENSHIP—Continued.

Dr. Gates	The Teaching of Citizenship	Historical Outlook, June, 1920.
Russell	Scouting Education	Report 49th Annual Convention, Boy Scouts of America, N. Y. City.
	Education for Initiative and Originality, Bulletin 1919, (15c)	Teachers College, Columbia University, New York City.
	Training in Duties of Citizenship, Bulletin No. 8.	Board of Education, State House, Boston, Mass.
Chassell & Upton	A Measurement Scale in Citizenship	Teachers College Record, January, 1919, Columbia Univ., New York City.
	The Teaching of Citizenship in the Grades	Teachers College Record, May, 1921, Columbia University, New York City.
Stratton	Great American Speeches (Henry, Washington, Jefferson, Webster, Lincoln, Roosevelt, Wilson).	Lippincott Co., Philadelphia.

PLAY.

Bancroft	Games for Playground, Home, School and Gymnasium	Macmillan Co., Atlanta, Ga.
Curtis	Education Through Play	Silver, Burdett & Co., N. Y. City.
Lee	Play in Education	Macmillan Co., Atlanta, Ga.
Curtis	The Play Movement and Its Significance	Macmillan Co., Atlanta, Ga.
Johnson	Education by Plays and Games	Ginn & Co., Atlanta, Ga.
Clark	Physical Training for Elementary Schools	Benj. H. Sanborn Co.
Elson & Trilling	Soical Games and Group Dances	Lippincott & Co., Atlanta, Ga.
Hofer	Children's Old and New Singing Games	
Carey	Plays and Games for School	
Johnson	What to Do at Recess	Ginn & Co., Atlanta, Ga.
Palmer	Play Life in the First Eight Years	Ginn & Co., Atlanta, Ga.

HEALTH.

Andress	Health Education in Rural Schools	Houghton-Mifflin Co., N. Y. City.
Dressler	School Hygiene	Macmillan Co., Atlanta, Ga.
Hoag & Terman	Health Work in Schools	Houghton-Mifflin Co., N. Y. City.
Terman	Hygiene of the School Child	Houghton-Mifflin Co., N. Y. City.
Hill	The New Public Health	Macmillan Co., Atlanta, Ga.
Reade	Mothercraft Manual	Little, Brown & Co.
Hunt, Johnson & Lincoln	Nutrition of the School Child	Horace Mann, P. T. A. Manual.
Allen	Civics and Health	Ginn & Co., Atlanta, Ga.
Bussey	A Manual of Personal Hygiene	Ginn & Co., Atlanta, Ga.
Jewett	The Next Generation	Ginn & Co., Atlanta, Ga.
	Stories, Charts and Playlets:	
	Cho Cho and the Health Fairy	Child Health Organization, 370 Seventeenth
	Rhymes of Cho Cho's Grandmother	Ave., New York City, N. Y.
	Rosy Cheek and Strong Heart	
	Child Health Alphabet	
	Ten Bulletins on Health Education	Dept. of Interior, Bureau of Education, Washington, D. C.
Rose	Feeding the Family	Macmillan Co., Atlanta, Ga.
Payne	Education in Accident Prevention	Lyons and Carnahan.
Hutchinson	Morn Till Night	Houghton-Mifflin Co., N. Y. City.
Andress	Teaching Hygiene in the Grades	Houghton-Mifflin Co., N. Y. City.
Wood	The Teacher's Part in School Hygiene	American School Book Hygiene Association.
Hough & Swdgwick	The Human Mechanism	Ginn & Co., Atlanta, Ga.
Burks	Health and the School	D. Appleton & Co., N. Y. City.
Geer	Food—What It Is and Does	
Brown	Health Aspects of the School Lunches	Health Dept., N. Y. City.
Williams	Healthful Living	Macmillan Co., Atlanta, Ga.
Rapeer	School Hygiene	Scribners Sons, Atlanta, Ga.

HEALTH—Continued

Fisher & Fish	How to Live	Funk & Wagnalls.
McGreedy	Rural Science Reader	
Showalter	Handbook for Rural School Officers	Houghton-Mifflin Co., Boston, Mass.
Ayers, Williams & Wood	Healthful Schools	Houghton-Mifflin Co., Boston, Mass.
Williams	Personal Hygiene Applied	W. B. Saunders.
Bocker	The School Child, Physical Examination (Free)	State Board of Health.
Bancroft	The Posture of School Children	Macmillan Co., Atlanta, Ga.
Cornell	Health and Medical Inspection of School Children	F. A. Davis Co.
Gulick & Ayres	Medical Inspection of School Children	Russell Sage Foundation.

SCIENCE.

Trafton	The Teaching of Science in the Elementary School	Houghton-Mifflin Co., N. Y. City.
Twiss	Science Teaching	Macmillan Co., Atlanta, Ga.
Van Buskirk & Smith	The Science of Everyday Life	Houghton-Mifflin Co., N. Y. City.
Morgan	The Boy Electrician	Lathrop.
Ritchie	A Primer of Sanitation	World Book Co., Yonkers, N. Y.
Baker	Boys First and Second Books of Invention	McClure-Phillips Co.
Winslow	Healthy Living	Chas. E. Merrill, N. Y. City.
Fall	Science for Beginners	World Book Co., Yonkers, N. Y.
Hessler	The First Year of Science	B. H. Sanborn & Co.
Hunter & Whitman	Civic Science in the Home	American Book Co., Atlanta, Ga.
Woolhull	The Teaching of Science	Macmillan Co., Atlanta, Ga.
Downing	A Source Book of Biological Nature Study	Univ. of Chicago Press, Chicago.
Fouriner	Wonders of Physical Science	Macmillan Book Co., Atlanta, Ga.
Jones	Thomas A. Edison	Crowell Pub. Co.
Clark	An Introduction to Science	American Book Co., Atlanta, Ga.
Caldwell & Eichenberry	General Science	Ginn & Co., Atlanta, Ga.

SCIENCE—Continued

Reed	Flower Guide	Comstock Pub. Co., Ithaca, N. Y.
	Bird Guide	Comstock Pub. Co., Ithaca, N. Y.
	Tree Guide	Comstock Pub. Co., Ithaca, N. Y.
Washburne	Common Science	World Book Co., Yonkers, N. Y.
Keeler	Our Native Trees	Scribners, Atlanta, Ga.
Matthews	Field Book of American Flowers	Putnam.

HOME ECONOMICS.

Taber	Business of the Household	Lippincott Co., Philadelphia, Pa.
Dinham	Spending the Family Income	
Bruere	Increasing Home Efficiency	
Crissy	The Story of Food	Rand, McNally Co., Chicago, Ill.
Farmer	Boston Cooking School Cook-Book	Little Brown Co., Boston, Mass.
Kinne & Cooley	Food and Health	Macmillan Co., Atlanta, Ga.
Kinne & Cooley	Foods and Household Management	Macmillan Co., Atlanta, Ga.
Norton	Foods and Dietetics	
Rose	Feeding the Family	Macmillan Co., Atlanta, Ga.
Willard & Gillette	Dietetics for High Schools	Macmillan Co., Atlanta, Ga.
Powell	Successful Canning and Preserving	Lippincott Co., Philadelphia, Pa.
Baldt	Clothing for Women	Lippincott Co., Philadelphia, Pa.
Winterburn	Principles of Correct Dress	
Kinne & Cooley	Shelter and Clothing	Macmillan Co., Atlanta, Ga.
Holt	Care and Feeding of Children	
Gibbs	Proper Feeding of the Family	
Pope	Home Care of the Sick	Putnam's Sons, New York.
Henderson	Practical Home Nursing	
Kinne & Cooley	Home and the Family	Macmillan Co., Atlanta, Ga.
Balderston	Laundering	Lippincott Co., Philadelphia, Pa.

HOME ECONOMICS—Continued.

Herrick	Insects Injurious to Household and Annoying to Man	American Book Co., Atlanta, Ga.
Greene	Food Products of the World	Lippincott Co., Philadelphia, Pa.
Chamberlin	How the World is Fed	Macmillan Co., Atlanta, Ga.
Chamberlin	How the World is Clothed	Macmillan Co., Atlanta, Ga.
Stiles	An Adequate Diet	
Austin	Domestic Science (Set of 3 Volumes)	Lyons & Carnahan, New York City.
Cooley & Spahr	Household Arts for Home and School (2 Volumes)	
	Journal of Home Economics	1211 Cathedral St., Baltimore, Md.
Balderston	Housewifery	Lippincott & Co., Philadelphia, Pa.
Conley	Principles of Nutrition	American Book Co., Atlanta, Ga.
Free Bulletin	Belmont Dairy—What Milk Will Do for Your Child	Belmont Dairy Co., Atlanta.
	Material on Nutrition Classes For Schools	U. S. Bureau of Education, Washington, D. C.
Bulletin	Diet for the School Child	U. S. Bureau of Education.
	Farmers' Bulletin (Free)	U. S. Dept. of Agriculture.
Bulletin 142	Nutrition and Nutritive Value of Food	
Bulletin 375	Care of Food in the Home	
Bulletin 391	Economical Use of Meat in the Home	
Bulletin 712	School Lunches	
Bulletin 717	Food for Young Children	
Bulletin 771	Homemade Fireless Cookers and Their Uses	
Bulletin 808	How to Select Foods—2 Cereal Foods	
Bulletin 927	Farm Home Conveniences	
Bulletin 941	Water Systems for Farm Houses	
Bulletin 1186	Pork on the Farm—Killing, Curing and Canning	
Bulletin 1207	Milk and Its Uses in the Home	
Bulletin 1219	Floors and Floor Coverings	
Bulletin 1228	A Week's Food for the Average Family	

AGRICULTURE.

Nolan	The Teaching of Agriculture	Houghton-Mifflin Co., N. Y. City.
Storm & Davis	How to Teach Agriculture	Lippincott & Co., Atlanta, Ga.
Hodge	Nature Study and Life	Ginn & Co., Atlanta, Ga.
Plumb	A Study of Farm Animals	Webb Pub. Co., St. Paul, Minn.
Plumb	Beginnings in Animal Husbandry	Webb Pub. Co., St. Paul, Minn.
Weld	Marketing of Farm Products	Macmillan Co., Atlanta, Ga.
Davis	Truck Gardening in the South	Lippincott Co., Philadelphia, Pa.
Whitson & Waltser	Soils and Soil Fertility	Webb Pub. Co., St. Paul, Minn.
Van Slyke	Fertilizers and Crops	
Graves	Rural Problems of Today	
Plunkett	Rural Life Problems in the United States	
Corbett	Farm Gardening	
Findley	Practical Gardening	
Boyle	Vegetable Growing	American Book Co., Atlanta, Ga.
Carleton	Story of Cotton	
Morgan	Field Crops for the Cotton Belt	
Duggar	Southern Field Crops	Macmillan Co., Atlanta, Ga.
Dietrick	Swine Husbandry	
Eckles	Dairy Farming	Macmillan Co., Atlanta, Ga.
Robinson	Principles and Practice of Poultry Culture	
Sears	Productive Orcharding	Lippincott Co., Philadelphia, Pa.
Bailey	Horticulturist's Rule Book	Macmillan Co., Atlanta, Ga.
Gould	Peach Growing	
Hume	Pecan and Its Culture	
McKeever	Farm Boys and Girls	
Ogden	Rural Hygiene	
Harwood	Rural Hygiene	
Warren	Elements of Agriculture	Macmillan Co., Atlanta, Ga.
Hummell	Materials and Methods in High School Agriculture	Macmillan Co., Atlanta, Ga.

AGRICULTURE—Continued

Burkett-Swartzell	Farm Arithmetic	Orange Judd.
Cobleigh	Handy Farm Devices and How to Make Them	Orange Judd.
Warren	Farm Management	MacMillan Co., Atlanta, Ga.
Plumb	Types and Feeds of Farm Animals	Ginn & Co., Atlanta, Ga.
Lewis	Productive Poultry Husbandry	Lippincott & Co., Atlanta, Ga.
King	The Soil	Dutton.
Duggar	Fungus Diseases of Plants	Ginn & Co., Atlanta, Ga.
O'Kane	Injurious Insects	Macmillan Co., Atlanta, Ga.
Weed	Farm Friends and Farm Foes	D. C. Heath & Co., Atlanta, Ga.
Lloyd	Productive Vegetable Gardening	Lippincott & Co., Atlanta, Ga.
Davis	School and Home Gardens	Lippincott & Co., Atlanta, Ga.
Comstock	Handbook of Nature Study	Comstock Pub. Co.
	Educational Bird Leaflets	Nat'l Assn. of Audibon Societies.
Harwood	New Creations in Plant Life	Macmillan Co., Atlanta, Ga.

ON RURAL EDUCATION.

Pittman	Successful Teaching in Rural Schools	American Book Co., Atlanta, Ga.
Betts & Hall	Better Rural Schools	Bobbs, Merrill Co., Indianapolis, Ind.
Carney	Country Life and the Country School	Row, Peterson & Co., New York City.
Woofter	Teaching in the Rural Schools	Houghton-Mifflin Co., N. Y. City.
Hart	Educational Resources of Village and Rural Communities	Macmillan Co., Atlanta, Ga.
Wilkinson	Rural School Management	Silver, Burdett & Co., N. Y. City.
MacGarr	The Rural Community	Macmillan Co., Atlanta, Ga.
Rapeer	Consolidated Rural Schools	
Foght	Rural Teacher and His Work	Macmillan Co., Atlanta, Ga.
Dinsmore	Teaching a District School	American Book Co., Atlanta, Ga.
Arp	Rural Education and the Consolidated School	

ON RURAL EDUCATION—Continued

Kern	Among Country Schools	Ginn & Co., Atlanta, Ga.
Andress	Health Education in Rural Schools	Houghton-Mifflin Co., Boston, Mass.
Challman	The Rural School Plant	Bruce Publishing Co., Milwaukee, Wis.
Dewey	New Schools for Old	E. P. Dutton Co., N. Y. City.
Finney	The Administration of Village and Consolidated Schools	Macmillan Co., Atlanta, Ga. The Century Co., N. Y. City.
Galpin	Rural Life	
National Child Labor Committee	Rural Child Welfare (1922)	Macmillan Co., Atlanta, Ga.
Showalter	A Handbook for Rural School Officers	Houghton-Mifflin Co., Boston, Mass.
Kennedy	Rural Life and the Rural School	American Book Co., Atlanta.

ART FOR PRIMARY WORK

Carpenter	Stories Pictures Tell	Rand-McNally Co., N. Y. City.
Snow & Froehlich	Industrial Arts Text Books (I, II, III)	Prang.
	Industrial and Applied Art Books (I, II, III)	Atkinson, Manyser & Co.
	Practical Drawing Books	Practical Drawing Co., Atlanta, Ga.
Krackowizer	Project Methods in Primary Grades	Lippincott & Co., Atlanta, Ga.
	Children's Occupations	Houghton-Mifflin Co., N. Y. City.
Dunn & Wells	Educative Seat Work	State Normal School for Women, Farmville, Va.
Fisher	What Shall We Do Now?	
Brown	Clay Modeling for Infants	
Henderson & Palen	What and How	
Kimball	Games, Seat Work and Sense Training	

ART—INTERMEDIATE.

	Practical Drawing Books, IV, V, VI	Practical Drawing Co., Atlanta.

ART—INTERMEDIATE—Continued

	Industrial and Applied Arts Books IV, V, VI	Atkinson, Mentzer & Co., Chicago, Illinois.
Hubbard	Little Journeys to the Homes of Great Artists	Roycrofters, East Aurora, New York.
Perry	With Agir Girges in Egypt	Prang.
Carpenter	Stories Pictures Tell, Books IV, V, VI	Rand-McNally Co., N. Y. City.
Wilson	Picture Study in Elementary Schools	

ART—HIGH SCHOOL.

	Art Education for High Schools	Prang.
DeForest	A Short History of Art	The Davis Press, Worcester, Mass.
Snow and Froehlich	Theory and Practice of Color	Prang.
Parsons	Interior Decoration	The Davis Press, Worcester, Mass.
Bacon	Pictures Every Child Should Know	Grossett.
Bailey	Twelve Great Paintings	Prang.
Huell	How to Study Pictures	The Davis Press, Worcester, Mass.
Perry	Egypt, the Land of the Temple Builders	Prang.

MUSIC.

Newton	Music in the Public Schools	Ginn & Co., Atlanta, Ga.
Faulkner	Music Appreciation	Ditson Co., Boston, Mass.
Faulkner	What We Hear in Music	Ed. Dept., Victor Talking Machine Co., Camden, N. J.
Clark	Music Appreciation for Little Children	Ed. Dept., Victor Talking Machine Co., Camden, N. J.
Newton	Primary Melodies	Ginn & Co., Atlanta, Ga.
Antcliffe	How to Enjoy Music	Dutton Pub. Co., N. Y. City.
Lee	On Listening to Music	Dutton Pub. Co., N. Y. City.
Scholes	Musical Appreciation in Schools	Oxford Press, N. Y. City.

MUSIC—Continued

Hehrkend	School Music Teaching	C. C. Birchard, Boston, Mass.
Hollis Dann	Complete Manual	American Book Co., Atlanta, Ga.
	Teachers' Manuals—Progressive Series	Silver, Burdett Co., Boston, Mass.
Crane	Music Teacher's Manual	Julia E. Crane, Potsdam, N. Y.
	Proceedings—Music Supervisors' National Conference, St. Joseph, Mo. (1921) $2.00	Dr. Oscar Bowen, No. 2 Gaddis Heights, Ann Arbor, Mich.
	Proceedings—Music Supervisors' National Conference, Nashville, Tenn. (1922) $2.00	Dr. Oscar Bowen, No. 2 Gaddis Heights, Ann Arbor, Mich.
	Song Books:	
Riley-Gaynor	Songs of the Child world	John Church Co.
J. W. Elliott	Mother Goose Set to Music	McLouhglin & Co.
Neidlinger	Small Songs for Small Singers	G. Schirmer.
Fanny Knowlton	Nature Songs for Children	Milton Bradley Co., Atlanta, Ga.
	Community Songs, Twice 55 Best Songs	C. C. Birchard, Boston, Mass.
Fryberger	Listening Lessons in Music	Silver, Burdett Co., Boston, Mass.
Stone	Music Appreciation	Scott, Foresman & Co., Chicago.

MORAL EDUCATION.

Adler	The Moral Instruction of Childhood	
Davis	Vocational and Moral Guidance	Ginn & Co., Atlanta, Ga.
Dewey	Moral Principles in Education	Houghton-Mifflin Co., N. Y. City.
Engleman	Moral Education in the Home and School	
Palmer	Moral and Ethical Instruction in School	Houghton-Mifflin Co., Boston, Mass.
Pugh	Moral Training in Our Public Schools	
Sadler	Moral Instruction and Training in School	
Sharp	Education for Character	Bobbs Merrill Co., Indianapolis.
Sheath & Hodges	Moral Training in the School and Home	

SUPERVISION.

Nutt	Supervision of Instruction	Houghton-Mifflin Co., N. Y. City.
Pittman	The Value of High School Supervision	
Wagner	Common Sense in Supervision	
Dunn	Educational Adminsitration and Supervision for 1920	
Burton	Supervision and the Improvement of Teaching, 1922	D. Appleton, N. Y. City.

PSYCHOLOGY.

Norsworthy & Whitley.	Psychology of Childhood	Macmillan Co., Atlanta, Ga.
LaRue	Psychology for Teachers	American Book Co., Atlanta, Ga.
Pyle	The Psychology of Learning	Silver, Burdett Co., New York.
James	Talks to Teachers	Holt & Co., New York.
Cameron	Psychology and the School	Century Co., New York.
Colvin & Bagley	Human Behavior	Macmillan Co., Atlanta, Ga.
Freeman	The Psychology of the Common Branches	Houghton-Mifflin Co., N. Y. City.
Thorndike	Educational Psychology, Briefer Course	Columbia University, N. Y. City.
Starch	Educational Psychology	Silver, Burdett Co., New York.
Pyle	The Science of Human Nature	Silver, Burdett Co., New York.
Stratton	Developing Mental Power	Macmillan Co., Atlanta, Ga.
McDougall	Social Psychology	
Thorndike	Principles of Teaching	A. G. Seiler, N. Y. City.
Dewey	How We Think	D. C. Heath Co., Atlanta, Ga.
Woodsworth	Dynamic Psychology	Macmillan Co., Atlanta, Ga.

CHILD STUDY.

Kirkpatrick	The Fundamentals of Child Study	Macmillan Co., Atlanta, Ga.
Waddle	Introduction to Child Psychology	Houghton-Mifflin Co., Boston, Mass.
Harrison	Study of Child Nature	
Cabot	Child Study and Child Training	

CHILD STUDY—Continued

Scott	How to Know Your Child	Lippincott Co., Philadelphia, Pa.
Hollingsworth	The Psychology of Sub-Normal Children	
Washburne	Study of Child Life	
Tanner	The Child	Rand-McNally, N. Y. City.
Kirkpatrick	Individual in the Making	Macmillan Co., Atlanta, Ga.
G. S. Hall	Youth	D. Appleton, N. Y. City.
Forbish	The Boy Problem	Pilgrim Press.
Puffer	The Boy and His Gang	Houghton-Mifflin Co., N. Y. City.
Terman	The Intelligence of School Children	Houghton-Mifflin Co., N. Y. City.

MEASUREMENTS.

Monroe	Measuring the Results of Teaching	Houghton-Mifflin Co., N. Y. City.
McCall	How to Measure in Education	Macmillan Co., Atlanta, Ga.
Wilson & Hoke	How to Measure	Macmillan Co., Atlanta, Ga.
Terman	The Intelligence of School Children	Houghton-Mifflin Co., N. Y. City.
Monroe, DeVoss & Kelly	Educational Tests and Measurements	Houghton-Mifflin Co., N. Y. City.
Terman	The Measurement of Intelligence	Houghton-Mifflin Co., N. Y. City.
Whipple	Intelligence Tests and Their Uses	
Pyle	The examination of School Children	Silver, Burdett Co., New York.
Chapman	Scientific Measurements of Classroom Product	Silver, Burdett Co., New York
Pressey	Introduction to the Use of Standard Tests	World Book Co., Yonkers, N. Y. City.
	Twenty-First Year Book	Public School Pub. Co., Bloomington, Ill.

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High School and Supervisory

1. Manual for Georgia Teachers, County Superintendent, free.

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3. Methods of Teaching in High Schools (Parker), Ginn & Co., Atlanta, $1.80, postpaid.

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